



**MINISTRY of EDUCATION  
YOUTH & INFORMATION**

# **CURRICULUM ANALYSIS: ESSENTIAL OBJECTIVES & CONTENT FOCUS**

**NSC GRADES 7 – 9**



**2<sup>nd</sup> Edition**



# CURRICULUM ANALYSIS: ESSENTIAL OBJECTIVES & CONTENT FOCUS NSC GRADES 7 – 9

CURRICULUM ANALYSIS: ESSENTIAL OBJECTIVES & CONTENT FOCUS

NSC GRADES 7 -9

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## INTRODUCTION

The information provided here is based on an analysis of the attainment targets, objectives and the related content outlined in the NSC. The information is also related to the framework that outlines the curriculum focus and the guidelines for modification and adaptation so that the teaching-learning process is consistent with the expected approach. The “essential” objectives included, were used to inform the design of the diagnostic assessment tools that form a part of the process for generating relevant learner profiles. They are aligned to other elements of the curriculum such as:

- Content - strands, themes, focus questions, big ideas
- Assessment - Attainment Targets, Benchmarks

The categories of subject areas that are addressed are:



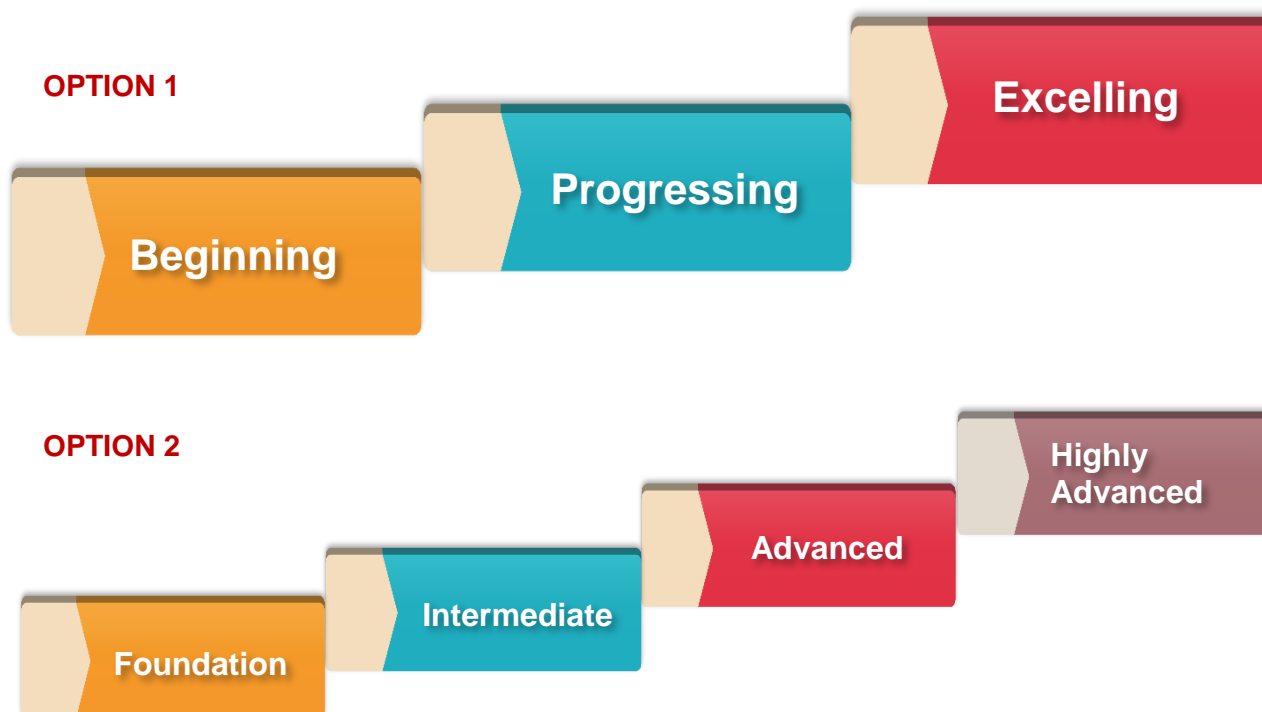
**EXPLORATORY CORE**

**ENRICHMENT**

**CREATIVE EXPRESSIONS**

**RESOURCE & TECHNOLOGY**

These curriculum elements are to be integrated to create a Relevant Customised Unit Plan (RCUP) for each group of students based on grade level requirements. The unit plan should be used to assess the extent to which they are ready to access the formal teaching-learning episodes/instruction. The relevance of this plan is to be determined by policy priorities (see Figure 1) that pertain to students' development, readiness for learning, the school context, the current COVID 19 situations and the influence of these factors on the nature and scope of the school learning and intervention plan at the local level. This unit plan should also be inclusive and is based on students' profile. At the secondary level, the pathways are referred to as: Secondary Pathway One – General, Consultative Learning (SPI), Secondary Pathway Two – Transitional, Customised Learning (SPII) and Secondary Pathway Three– Special Customised Learning (SPIII). Within each pathway however, consideration must be given to the level or rate at which each student's profile is improving based on the expectations for the relevant grade. An appropriate set of descriptors may be selected by the school to guide the interpretation of data about student's development. Examples of descriptors that convey stages of development/readiness relative to attainment targets are shown below.





In preparing the Unit Plan and the related Lesson Plans, the **guidelines** provided for **Curriculum Focus, Modification and Adaptation** should be observed. To further enable this process, suggested steps for planning for learning are highlighted in other sections of this presentation.

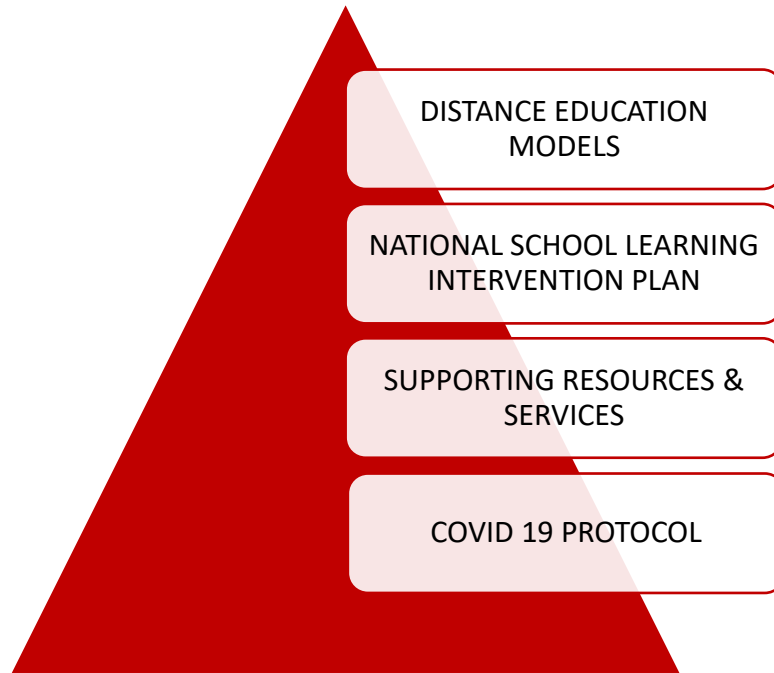


Figure 1: Examples of policy priorities that are to inform the process of planning for teaching and learning

## PREPARATION OF UNIT PLAN

### Purpose and Components

A Unit Plan is comprised of several complementary elements that are influenced in design, by the focus of the curriculum and the profile of the learners. This plan for one group of students at the same grade level, is likely to differ due to the diverse profiles of the learners in each group. Despite the differences, their purpose is expected to be the same – serving as a source of evidence of the interpretation of the national curriculum at the classroom level and as a frame of reference for the preparation of lesson plans.

Remember: The Unit Plan has to be designed to suit a particular group of students based on their background, interests, abilities, learning challenges, to name a few of their characteristics.

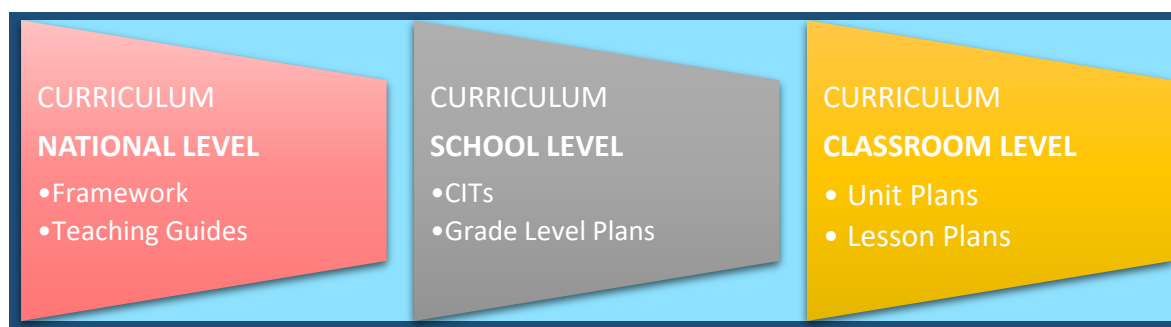
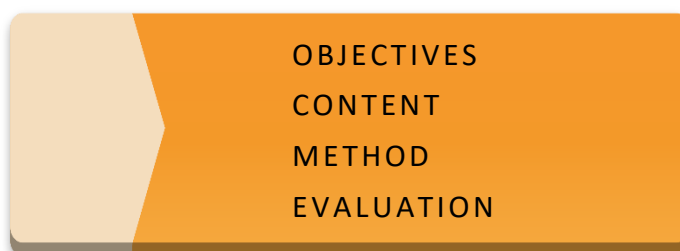


Figure 2: Highlighting the relationship between the national curriculum and related school level plans.

The four (4) major components of the Unit Plan are:

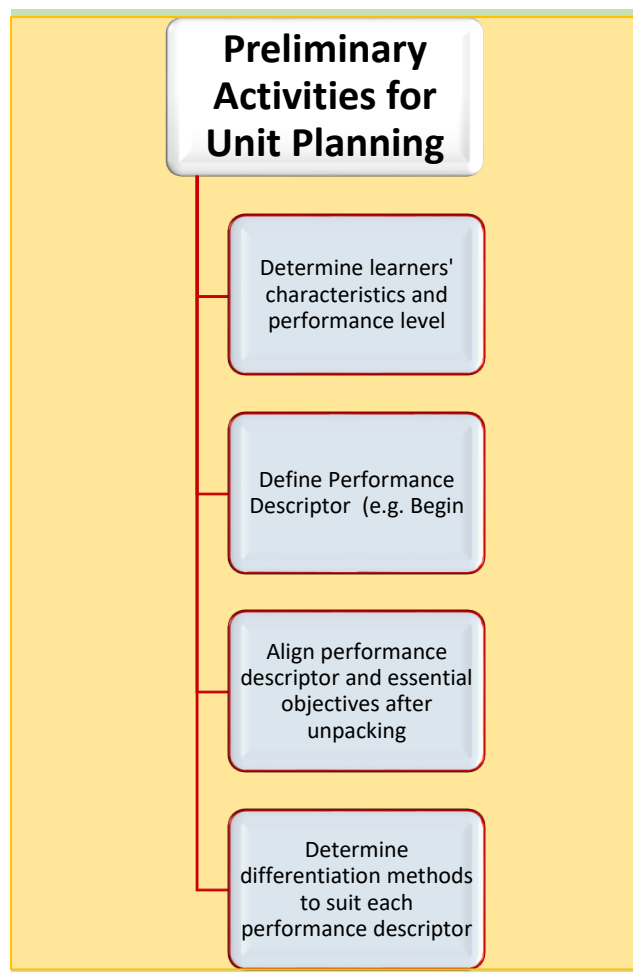


To ensure alignment of these components with national and school level focus, the list of activities below is to be carefully examined and executed.

## Steps in the Unit Planning Process

- **Classify students' attributes:** Identify commendable characteristics and challenges/concerns using their profiles. These would have been prepared from a combination of assessment activities.
- **Define the performance descriptor** to include the general attributes of students and their level of competence.
- **Unpack/Unwrap the Essential Objectives:**
  - Identify the specific performance or skill, concept/s and/or understanding that each conveys.
  - Using the relevant NSC guide for the grade level, identify fundamental competencies – attitudes, concepts, skills that are related to the essential objectives.
  - Select other relevant/complementary objectives and determine their meaning.

**Consideration should also be given to objectives and content that reflect emergent policy priorities.** For example, Figure 1 highlights students' attitude towards the vulnerable due to COVID 19 pandemic as a priority issue. In light of this expectation, objectives from various subject areas should be identified and used in planning for learning.
- **Align the objectives with the performance descriptor (beginning)**
- **Identify from the NSC Guides, relevant learning activities and assessment criteria** for each performance descriptor
- **Select differentiation methods** and align with objectives, learning activities and assessment criteria
- Complete the **Customized Unit Plan Template**



*Figure 3: Preliminary activities for the preparation of a customized inclusive Unit Plan*

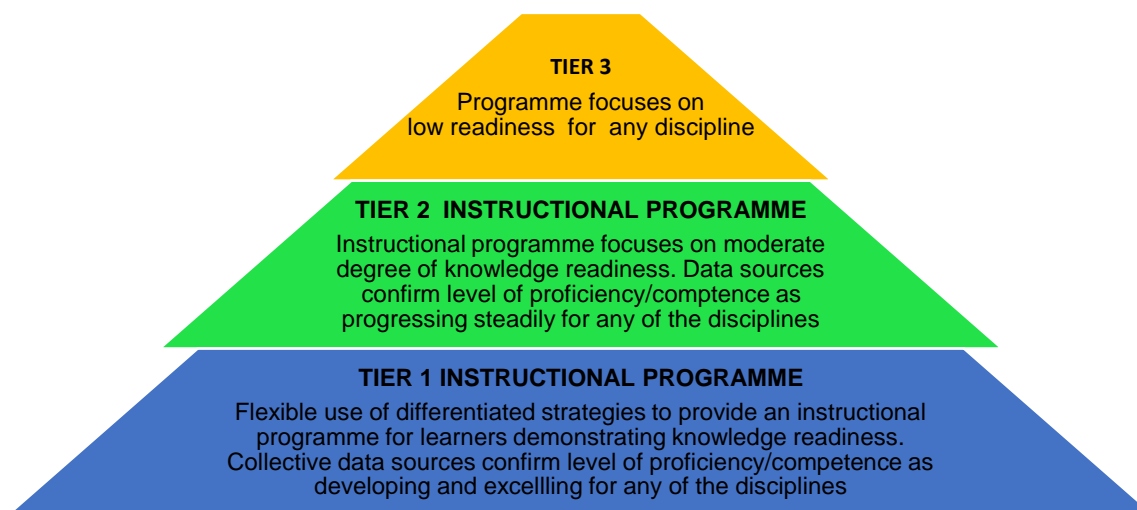
**The NSC for each subject area should be used as a guide for these processes.**

## TIERED INSTRUCTION



There are various types of differentiated models. Tiered Instruction is one of the models recommended for an inclusive approach that will help in reaching each learner. This is because consideration is given to special needs and customized learning based on indicators of readiness or performance descriptors from diagnostic assessment. Tiered instruction is flexible, as the strategies are adjusted as the learner makes progress or if there is stagnancy or decline in performance level, indicating the need for further psycho-educational assessment.

Tiered programmes can also be designed to reach different groups of students with similar challenges. However, as each learner makes progress, transition to another more suitable programme is done. Any special support that is required to help learners transition smoothly and cope with the new programme, is be provided as part of the support service or as a feature of the programme design. Collaborative learning strategies – peer mentoring, team learning, buddy system etc. are useful group-based strategies for helping learners support and hold each other accountable to follow through on agreed/negotiated expectations or code of engagement.



### NOTE

Tiered instruction is applicable for all learning pathways as a student may require special intervention to develop competencies at any point in their programme of study. This is a major reason why it should not be used as a streaming mechanism. Ineffective use of the model will lead to low sense of self by students. In a similar manner, teachers will begin to question their judgement about their effectiveness as learning facilitators. If not addressed appropriately, the situation can escalate into further undesirable outcomes.

## The Differentiated Unit Plan Template

<b>Grade/Class:</b>			
<b>Subject</b>			
<b>Date &amp; Duration</b>			
COMPONENTS OF PLAN	LEARNING PATHWAYS FOR A DIFFERENTIATED PLAN		
	BEGINNING	PROGRESSING	EXCELLING
<b>Pertinent Learner Characteristics being Considered</b> (commendable attributes & challenges)			
<b>Learning Objectives</b> relative to Characteristics to be addressed (ability levels, skills, attitudes etc.)			
<b>Content Focus &amp; Organization</b> (concepts, key skills, attitudes etc. method/s of integration within/across disciplines)			
<b>Differentiation Method/s:</b>  1. Task Complexity 2. Learning Material & Modality 3. Learner Participation/Expected Learner Response to Tasks/s (Products) 4. Nature and Level of Support	1.		
	2.		
	3.		
	4.		
<b>Assessment Considerations</b> (nature of differentiation, methods, criteria etc.)			

The following information on the curriculum analysis for the subject areas included, should be used to engage in the Unit Planning Process, including the completion of the template provided.



# CURRICULUM ANALYSIS & ESSENTIAL OBJECTIVES

## GRADES 7 - 9

This section shows the number of objectives and the content strand/theme to which they are assigned. Objectives are included from various Units of the NSC and for each Term. These objectives are to be carefully examined to determine their meaning, the related content and competencies the learners are to acquire/develop.

## MATHEMATICS

### GRADE 7

<i>Grade 7</i>		
<i>Mathematics</i>		
<i>Strands</i>	<i>Number of Objectives</i>	<i>Number of “major” objectives</i>
Number	22	18
Measurement	4	4
Geometry	9	5
Algebra	13	7
Statistics and Probability	3	3
<b>Total</b>	<b>51</b>	<b>37</b>

**N.B.** Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.



MATHEMATICS - GRADE 7			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Describe different types of numbers in the real number system (Natural, Whole, Integer, Rational, Irrational);</li> <li>Compare and order a set of numbers;</li> <li>Perform the four basic operations, including multiple operations, on real numbers, mentally, using paper and pencil, and in problem situations;</li> <li>By rounding off, approximate a given number to the nearest thousandths, hundredths, tenths, tens, hundreds, thousands, etc.);</li> </ul>	Number	1	1
<ul style="list-style-type: none"> <li>Identify and use the following properties of arithmetic:                             <ol style="list-style-type: none"> <li>Commutative;</li> <li>Associative;</li> <li>Distributive.</li> </ol> </li> <li>Identify and use the following concepts:                             <ol style="list-style-type: none"> <li>Identity;</li> <li>Inverses.</li> </ol> </li> <li>Write a fraction as a ratio and vice versa;</li> <li>Compare two quantities using ratios;</li> <li>Divide a quantity in a given ratio;</li> <li>Identify quantities in proportion.</li> </ul>	Number	2	1

<ul style="list-style-type: none"> <li>• Illustrate data using Venn diagrams (at most two intersecting sets within the universal set);</li> <li>• Obtain and interpret information from Venn Diagrams</li> <li>• Compute the total price given quantity and unit price;</li> <li>• Compute a unit price given the quantity and total price;</li> <li>• Compute the quantity given the total price and the unit price;</li> <li>• Identify 'best buys' and bargains by comparison of unit costs;</li> <li>• Calculate profit and loss in monetary and percentage terms;</li> <li>• Convert Jamaican dollars to other currencies and vice versa.</li> </ul>	Number	3	1
<ul style="list-style-type: none"> <li>• Measure length, mass, time, temperature, volume, capacity using appropriate instruments;</li> <li>• Perform conversions within units and across related units. (up to square units);</li> <li>• Find the perimeter of composite figures in a plane;</li> <li>• Find the area of composite figures in a plane.</li> </ul>	Measurement	1	2
<ul style="list-style-type: none"> <li>• Identify and draw nets of solids;</li> <li>• State the relationships between an object and its image in a plane when it undergoes a translation in that plane;</li> <li>• State the relationships between an object and its image in a plane when it is reflected in a line in that plane;</li> <li>• State the relationships between an object and its image in a plane when it is rotated about a point (the center of rotation) in that plane;</li> <li>• Identify and use angle, side and symmetry</li> </ul>	Geometry	1	3

properties of triangles and quadrilaterals;			
<ul style="list-style-type: none"> <li>Identify, add and subtract like and unlike terms;</li> <li>Write equations to illustrate word problems;</li> <li>Solve simple linear equations using:                             <ol style="list-style-type: none"> <li>flow diagrams;</li> <li>the balancing method;</li> </ol> </li> <li>Simplify algebraic expressions by grouping like terms.</li> </ul>	Algebra	2	3
<ul style="list-style-type: none"> <li>Read and identify points on the Cartesian plane;</li> <li>Represent a mapping by (a) rule, (b) diagram, (c) a set of ordered pairs;</li> <li>Recognize and give examples of each of the following type of mapping:                             <ol style="list-style-type: none"> <li>one-to-one;</li> <li>one-to-many;</li> <li>many-to-one;</li> <li>many-to-many</li> </ol> </li> </ul>	Algebra	3	2
<ul style="list-style-type: none"> <li>Find the mode, median and mean from raw data;</li> <li>Calculate the range of a data set (from raw data or from a frequency table);</li> <li>Construct and interpret simple frequency tables from a set of data.</li> </ul>	Statistics and Probability	2	2

# **GRADE 8**

<i>Grade 8—Mathematics</i>		
<i>Strands</i>	<i>Number of Objectives</i>	<i>Number of “major” objectives</i>
Number	23	16
Measurement	5	4
Geometry	9	5
Algebra	11	6
Statistics and Probability	3	2
<b>Total</b>	<b>51</b>	<b>33</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

MATHEMATICS - GRADE 8			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Evaluate the expressions <math>am</math>, <math>a^m \times a^n</math> and <math>\frac{a^m}{a^n}</math> where a, b, m, n, are whole numbers;</li> <li>Write numbers greater than or equal to 10 in standard form;</li> <li>Write a number to a given number of decimal places and significant figures;</li> <li>Express place values of digits in all bases including base 10;</li> <li>Add, subtract and multiply numbers written in base n, (where <math>1 &lt; n &lt; 10</math>);</li> <li>Convert numbers written in base n, (where <math>1 &lt; n &lt; 10</math>) to base 10 and vice versa.</li> <li>Identify and use the following concepts:               <ul style="list-style-type: none"> <li>Closure;</li> <li>Reflexive property;</li> <li>Symmetry property;</li> <li>Transitive property;</li> <li>Trichotomy Law.</li> </ul> </li> </ul>	Number	1	1
<ul style="list-style-type: none"> <li>Solve simple problems involving ratio and proportion</li> <li>Calculate simple interest on loans and deposits;</li> <li>Calculate compounded interest using a calculator (using a recursive method);</li> <li>Calculate total cost in a hire purchase agreement and compare Hire Purchase Price and Cost Price;</li> <li>Calculate discounts and taxes from given instructions.</li> </ul>	Number	2	3

MATHEMATICS - GRADE 8			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Determine the number of subsets of a given set;</li> <li>List all the possible subsets of a given set (number of elements in the given set should not exceed 4);</li> <li>Solve simple problems involving, at most, two subsets of the universal set.</li> <li>Identify and differentiate between simple and compound propositions</li> </ul>	Number	3	3
<ul style="list-style-type: none"> <li>Derive and use the formulae for the area of                             <ul style="list-style-type: none"> <li>(a) parallelograms,</li> <li>(b) triangles <math>\left(\frac{1}{2}bh\right)</math>,</li> <li>(c) trapezia;</li> </ul> </li> <li>Compute the total surface area of cubes, cuboids, cylinders and triangular prisms (using only triangles where the area can be calculated using <math>\left(\frac{1}{2}bh\right)</math> for the triangular prism);</li> <li>Perform conversion within units up to cubed units;</li> <li>Estimate and calculate the volume and capacity of cubes, cuboids, prisms, cylinders, and composite objects.</li> </ul>	Measurement	2	4
<p>Identify and use the following concepts:</p> <ul style="list-style-type: none"> <li>Investigate the relationship among angles formed by:                             <ul style="list-style-type: none"> <li>a. a transversal and two or more parallel lines;</li> <li>b. intersecting non-parallel lines;</li> </ul> </li> </ul>	Geometry	1	3

MATHEMATICS - GRADE 8			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Perform translations and identify images of objects, where the translation vector is given;</li> <li>Perform reflections and identify images of objects, where the mirror lines are the x or y-axes;</li> </ul>			
<ul style="list-style-type: none"> <li>Determine the properties of n-sided polygons, where <math>3 \leq n \leq 10</math>;</li> <li>Find the angle sum (sum of the interior angles) of polygons with n interior angles (<math>3 \leq n \leq 10</math>).</li> </ul>	Geometry	2	1
<p>Identify and use the following concepts:</p> <ul style="list-style-type: none"> <li>Change the subject of a simple formula e.g., <math>C=2\pi r</math>, making r the subject gives <math>r = \frac{C}{2\pi}</math>;</li> <li>Write inequalities to illustrate word problems;</li> <li>Illustrate inequalities on a number line;</li> <li>Solve simple linear inequalities and represent the solution on a number line.</li> </ul>	Algebra	1	2
<ul style="list-style-type: none"> <li>Draw straight line graphs of the form by                             <ol style="list-style-type: none"> <li>plotting points</li> <li>using the gradient and intercept;</li> </ol> </li> <li>Determine gradients and intercepts of straight-line graphs;</li> </ul>	Algebra	3	1
<ul style="list-style-type: none"> <li>Determine the mode, median and mean from a frequency table;</li> <li>Read, interpret and construct pictographs, bar charts, pie charts and line graphs</li> </ul>	Statistics and Probability	2	2

# **GRADE 9**

<i>Grade 9—Mathematics</i>		
<b><i>Strands</i></b>	<b><i>Number of Objectives</i></b>	<b><i>Number of “major” objectives</i></b>
Number	18	10
Measurement	6	4
Geometry	9	4
Algebra	24	12
Statistics and Probability	4	3
<b><i>Total</i></b>	<b>61</b>	<b>33</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***



MATHEMATICS - GRADE 9			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Simplify expressions using the laws of indices;</li> <li>Write numbers less than, greater than or equal to 10 in standard form.</li> </ul>	Number	1	2
<ul style="list-style-type: none"> <li>Solve more complex problems involving ratio and proportion.</li> <li>Use consumer arithmetic to solve real life problems;</li> <li>Calculate the total utility bill to be paid from given instructions;</li> <li>Calculate the wage and/ or salary of an employee from given instructions.</li> </ul>	Number	2	3
<ul style="list-style-type: none"> <li>Solve simple problems involving, at most, three subsets of the universal set (with at most two intersecting).</li> <li>Identify the order of a matrix;</li> <li>Perform scalar multiplication;</li> <li>Perform calculations to illustrate the commutativity and distributivity of matrices under addition.</li> </ul>	Number	3	1
<ul style="list-style-type: none"> <li>Calculate the area and circumference of a circle;</li> <li>Identify the arc, sector and segment of a circle;</li> <li>Find arc length;</li> <li>Find the area of a sector, segment or parts thereof of a circle with the use of angles.</li> </ul>	Measurement	1	4
<ul style="list-style-type: none"> <li>Use Pythagoras Theorem to solve right – angled triangle problems;</li> <li>Use trigonometric ratios to find unknown quantities in right-angled triangles only;</li> </ul>	Geometry	1	3
<ul style="list-style-type: none"> <li>Perform enlargements with the centre at the origin with scale factor <math>k</math>, <math>k \in \mathbb{N}</math>;</li> </ul>	Geometry	2	4

MATHEMATICS - GRADE 9			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Perform reflections and identify images of objects where the mirror line is any given line in the plane.</li> </ul>			
<ul style="list-style-type: none"> <li>Apply the distributive property to multiply two binomial expressions;</li> <li>Add and subtract simple algebraic fractions;</li> <li>Multiply and divide simple algebraic fractions;</li> <li>Factorize simple algebraic expressions where there is a simple algebraic common factor other than 1;</li> <li>Solve simultaneous linear equations by the methods                             <ol style="list-style-type: none"> <li>Substitution;</li> <li>Elimination.</li> </ol> </li> </ul>	Algebra	1	1
<ul style="list-style-type: none"> <li>Define a function as a many-to-one or one-to-one relation;</li> <li>Distinguish between the graph of a relation and the graph of a function;</li> <li>State the domain and range of a given function;</li> </ul>	Algebra	2	2
<ul style="list-style-type: none"> <li>Write vectors in column format;</li> <li>Use grid to locate and draw, position and relative position vectors;</li> <li>Draw a right-angled triangle representing a vector;</li> <li>Use Pythagoras' theorem to find the length of a vector;</li> </ul>	Algebra	3	2
<ul style="list-style-type: none"> <li>Determine simple probabilities and draw appropriate conclusions;</li> <li>Use fractions and percentages to describe probability;</li> <li>Interpret a probability given as a fraction or percentage.</li> </ul>	Statistics and Probability	2	1

# SOCIAL STUDIES

## GRADE 7

Grade 7—Social Studies		
Strands/Themes	Number of Objectives	Number of “major” objectives
Our Common Heritage	9	15
Living Together	63	28
The Physical Environment and Its Impact on Human Activities	9	5
Diversity, interdependence and sustainability in nature and society	27	11
<b>Total</b>	<b>108</b>	<b>59</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

SOCIAL STUDIES - GRADE 7			
Major Objectives	Strands/Themes	Terms	Units
Outline the national awards and honours conferred on Jamaicans	Our common heritage	1	2
Explain and use correctly the related concepts: development, hero, heroine, unsung hero, national hero, heroism			
Gather information from multiple sources, use selected details to compile an analytical biography of Jamaica's national heroes			
Discuss the characteristics of a hero and assess the extent to which national heroes fit these characteristics			
Compare the accounts of activities of national heroes from different sources and identify how each source treats the contributions made by the national heroes to national development			
Assess the ways in which we honour and remember our national heroes and suggest other ways that heroes may be honoured			
Use a variety of sources to identify the characteristics of culture	Our common heritage	1	3
Create a timeline to trace the coming of the different ethnic groups			
Classify aspects of culture as material and non-material			
Assess the contributions made by the different ethnic groups to Jamaica's culture and economy			
Identify and outline the events in Jamaican history which have contributed to our culture			

SOCIAL STUDIES - GRADE 7			
Major Objectives	Strands/Themes	Terms	Units
Establish criteria to determine the practices, beliefs and values of a culture that should be maintained and those that should be changed and use criteria to identify and discuss aspects of Jamaican culture that should be maintained and those that need to be changed			
Evaluate the ways used to preserve culture and heritage and suggest other methods that can be used to preserve heritage and culture	Our common heritage	1	3
Evaluate the contributions of selected persons to Jamaican culture in the areas of music, art, dance, sports, language			
Evaluate the ways used to preserve culture and heritage and suggest other methods that can be used to preserve heritage and culture			
Evaluate the role of institutions that help in the preservation of Jamaica's culture and heritage			
Explain the ways in which individuals can become a Jamaican citizen	Living Together	1	1
Explain and use correctly the related concepts: citizen, dual citizenship, active citizenship, global citizenship, digital citizenship, economic citizenship, naturalisation, alien, deportation, rights, responsibilities, freedom			
Analyse the Charter of Fundamental Rights and Freedoms and formulate questions about the extent of coverage for the rights of different individuals in the society			
Demonstrate the attitudes and behaviours of the ideal Jamaican citizen			
Outline the functions of agencies that protect the rights of citizens			

SOCIAL STUDIES - GRADE 7			
Major Objectives	Strands/Themes	Terms	Units
Identify breaches of the rights of the child as laid out in the United Nations Convention on the rights of the child			
Take steps to seek redress when rights are violated			
Explain and use the following concepts: resources, natural resources, renewable resources, exploitation, sustainability	Diversity, Interdependence and sustainability in nature and society	2	1
Categorize resources as renewable and non-renewable			
Gather information from a variety of sources and use information gathered to evaluate the importance of the sun, land and water as natural resources			
Assess the immediate and long-term multiple effects of the misuse of the forests on human beings and the physical environment			
Propose alternative policies, practices, actions relating to how natural resources can be used to foster economic development in Jamaica and the wider Caribbean			
Explain the following concepts: human resources, interdependence, workforce, population, employment, unemployment, underemployment	Living together	2	2
Classify human activities into primary, secondary, tertiary and quaternary industries			
Categorize careers as primary, secondary, tertiary and quaternary			
Assess the importance of effective training and education in utilizing natural resources			
Evaluate the provisions that have been made to facilitate training and development of Jamaica's human resource			

SOCIAL STUDIES - GRADE 7			
Major Objectives	Strands/Themes	Terms	Units
Identify and differentiate among social, economic and political institutions.	Living Together	2	3
Explain the following concepts: institution, social group, group cohesion, pressure group, deviance, norms, values, folkways, mores, taboo, socialization, social control			
Distinguish between primary and secondary; formal and informal groups.			
Assess the agents of socialization			
Describe the different family types in the Jamaicans society	Living Together	2	4
Explain the following concepts: family, family tree, family structures, procreation, identity, breadwinner			
Assess the functions of the family as a group in the society			
Analyse challenges faced within the family.			
Assess the work of agencies and programs that support the family			
Describe the effects of rotation and revolution on the Earth	The physical environment and its impact on human activities	3	1
Explain and use the following concepts: rotation, revolution, longitude, hemisphere, time zone, International Date Line, Greenwich Meridian, Greenwich Mean Time, seasons, axis, tides			
Explain how differences in time influence human activities around the world			
Explain how seasonal differences influence human activities			

SOCIAL STUDIES - GRADE 7			
Major Objectives	Strands/Themes	Terms	Units
Calculate time in various parts of the world using the meridians of longitude			
Use multiple sources to examine the relationship among members of different communities and between communities, then draw conclusions about the importance of cooperation within and among communities	Living Together	3	2
Develop and use correctly the concepts: integration, cooperation, region, bilateral, multilateral, interdependent, regional integration, bi-lateral agreement, multi-lateral agreement			
Design a programme to address a community problem			
Name organisations in Jamaica that promote community development			
Identify regional and international organisations and agencies with which Jamaica has ties and state how Jamaica has contributed to and benefitted from one regional and one international organisation			
Locate and name the countries that are members of CARICOM			
Outline the main functions of CARICOM, suggest how they may be achieved and discuss the potential benefits to member states			
Gather information from multiple sources and use it to explain the need for sustainable use of resources and protection of the environment.	Diversity, interdependence and sustainability in nature and society	3	3
Develop and use correctly the concepts: sustainable practices, conservation, preservation, reuse, recycle, reduce, protected area, endangered species, endemic species, biodiversity, energy conservation			



SOCIAL STUDIES - GRADE 7			
Major Objectives	Strands/Themes	Terms	Units
Discuss the ways in which production and consumption patterns of individuals, communities and countries can contribute to sustainable development practices.			
Suggest ways to reduce different types of waste			
Analyze laws in Jamaica that have been established to protect the environment and encourage conservation practices			
Implement/improve conservation practices within the school /community environment			

**GRADE 8**

<i>Grade 8—Social Studies</i>		
<b>Strands/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
Our Common Heritage	9	3
Living Together	41	31
The Physical Environment and Its Impact on Human Activities	8	5
Diversity, interdependence and sustainability in nature and society	37	17
<b>Total</b>	<b>87</b>	<b>56</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

SOCIAL STUDIES - GRADE 8			
Major Objectives	Strands	Terms	Units
Develop working definitions for and use the concepts: nation, nationalism, development, sovereignty	<i>Living together</i>	1	1
Recall the description of the profile of a Jamaican Citizen			
Differentiate between nationalism and citizenship			
Explain the vision statement for Vision 2030			
List the goals of Vision 2030			
Evaluate the strategies to achieve Vision 2030 Jamaica's Development Plan			
Develop an action plan to address challenges that may arise in achieving goals of Vision 2030			
Classify the forms of communication	<i>Living together</i>	1	2
Define the related concepts/terms: sender, receiver, message, transparency, communication, mass media, literacy, decision-making, social media, pressure group			
Distinguish among fact, opinion, propaganda			
Explore and analyze the intention of authors in print, verbal, visual or multi-media			
Analyze the impact of access to information on social and economic life in Jamaica			
Evaluate media's explicit and implicit messages against societal norms, ethical, moral and/or democratic principles			

SOCIAL STUDIES - GRADE 8			
Major Objectives	Strands	Terms	Units
Identify and outline the events in Jamaican history which have contributed to our culture	<i>Our Common Heritage</i>	1	3
Evaluate the contributions of selected persons to Jamaican culture in the areas of music, art, dance, sports, language Construct meaning for the term cultural icon, cultural identity			
Identify and describe the elements of culture			
Account for the relationship between topography and settlement, communication, and economic activities	<i>The physical environment and its impact on human activities</i>	2	1
Explain the terms/concepts: rock, soil, topography, bauxite, karst landscape, limestone, volcanic, settlement, communication, mining, quarrying			
Assess the different ways in which human activities impact the landscape			
Propose solutions to remedy the negative impact of human activities on the landscape			
Analyse maps, tables, charts			
Distinguish among social, economic and political institutions	<i>Living together</i>	2	2
Explain and use the terms: economic institution, financial literacy, budget, savings, investment, credit, insurance, thrift, bank, building society, credit union, credit, loan			
Explain the functions of economic institutions			

SOCIAL STUDIES - GRADE 8			
Major Objectives	Strands	Terms	Units
Identify unregulated and informal financial institutions			
Complete forms at a financial institution			
Participate in activities to develop the values and attitudes needed to live prudent financial lives			
Analyse the factors which influence consumer demand	<i>Living together</i>	2	3
Develop working definitions for the terms: goods, services, consumer, consumption, consumerism, needs, wants, budget, income, expenditure, globalisation			
Classify types of consumers			
Distinguish between consumers and producers			
Analyse the rights and responsibilities of the consumer			
Evaluate the role of government and consumer protection agencies in protecting the rights of the consumer			
Using multiple sources, gather, synthesize and assess evidence of climate change	<i>Diversity, interdependence and sustainability in nature and society</i>	3	1
Define and use correctly key concepts: climate change, carbon emission, carbon footprint, carbon credit, global warming, greenhouse gases, coral bleaching, sea level rise, carbon dioxide, deforestation			
Develop and present informative and analytical pieces on the role of local and international organizations and agreements which manage and monitor climate change			

SOCIAL STUDIES - GRADE 8			
Major Objectives	Strands	Terms	Units
Ask questions about climate change and select relevant information from multiple sources to answer questions related to climate change			
Analyse the costs and benefits of personal and collective choices of goods and services and the impact of these on climate change			
Propose strategies to mitigate the effects of climate change on Jamaica			
Distinguish between hazards and disasters, natural and human induced disasters	<i>Diversity, inter-dependence and sustainability in nature and society</i>	3	2
Define and use correctly concepts: hazards, disasters, drought, flood, earthquake, volcanic eruption, preparedness, natural disasters, storms, hurricanes, manmade disasters, mitigation, vulnerable			
Differentiate between facts and myths related to natural hazards and disasters			
Explain the causes and effects of natural disasters in the region: hurricane, earthquake, flooding, drought			
Participate in the disaster preparedness measures which are taken by citizens to reduce loss of life and damage to property			
Assess the effectiveness of organisations and institutions which manage and monitor disaster preparedness			

SOCIAL STUDIES - GRADE 8			
Major Objectives	Strands	Terms	Units
Define and use key concepts: biodiversity, habitat, ecosystem, conservation, preservation, extinction, deforestation, afforestation, desertification, endemic species, endangered species, environmental steward, national park, protected area	<i>Diversity, inter-dependence and sustainability in nature and society</i>	3	3
Gather, analyse and synthesize information from multiple sources on consequences of unsustainable use of natural resources on the economy and human health			
Assess the local and international measures and conventions which have been implemented to reduce the impact of environmental problems			
Examine multiple sources and formulate questions about the biodiversity, conservation and preservation, then gather information from multiple sources to answer these questions			
Gather information from multiple perspectives on the consumption patterns of humans and choices they make and the environmental problems /degradation being experienced in the region			

# **GRADE 9**

<i>Grade 9—Social Studies</i>		
<b>Strands/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
Our Common Heritage	11	5
Living Together	68	30
The Physical Environment and Its Impact on Human Activities	0	0
Diversity, interdependence and sustainability in nature and society	28	11
<b>Total</b>	<b>107</b>	<b>46</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***



SOCIAL STUDIES - GRADE 9			
Major Objectives	Strands/Themes	Terms	Units
Recall the meaning of the terms: culture, heritage, globalization, technology, socialisation, tradition, preservation	Our common heritage	1	1
Classify tangible and intangible aspects of Caribbean culture that have been assimilated from cultures outside of the region			
Assess how and why aspects of Jamaican/Caribbean culture have spread across the world			
Evaluate the effects of globalisation on the Jamaican culture			
Assess the contribution of the creative industries and sport to national development			
Outline stages of regional integration throughout Caribbean history	Living Together	1	2
Develop working definition for the concepts/terms: regional integration, federation, Caribbean citizen, bilateral agreement, multilateral agreement			
Outline the functions of CARICOM, CSME, OECS, CCJ			
Weigh the benefits and obstacles to regional integration			
Examine the role of Caribbean citizens, Caribbean governments, non-governmental organisations and corporate bodies in fostering regional integration.			
Gather and interpret data on social issues and use data to draw conclusions about these issues	Living together	1	3
Develop working definitions for the concepts: social problem, child abuse, domestic violence, juvenile delinquency, human trafficking,			

SOCIAL STUDIES - GRADE 9			
Major Objectives	Strands/Themes	Terms	Units
poverty, crime, teenage pregnancy, sexually transmitted infections			
Analyse the consequences of three social problems on the individual and the Jamaican society			
Make informed decisions or take positive action to prevent or reduce the impact of social issues			
Assess measures implemented by the government and non-governmental organisations to address the social problems in society			
Evaluate the importance of the development of a country's human and natural resources	Diversity, interdependence and sustainability in nature and society	2	1
Explain and use correctly the terms: sustainable rural and urban development, human development index, climate change			
Outline the factors that contribute to national development			
Explain Jamaica's National Development Plan (Vision 2030)			
Analyse Jamaica's National Goals (Vision 2030)			
Explain the concepts/terms: democracy, government, Westminster Model, executive, legislature, judiciary, senate, bicameral, bill, act/law, civil service, executive agencies	Living together	2	2
Explain the composition of each branch of government			
Evaluate the role of each branch of government			
Analyse the systems of checks and balances in the Jamaican government			

SOCIAL STUDIES - GRADE 9			
Major Objectives	Strands/Themes	Terms	Units
Define and use correctly the key concepts/terms: constituency, election, electioneering, gerrymandering, first past the post, vote, poll, polling station, ballot, campaign, political party, universal adult suffrage			
Outline the major steps of the electoral process in Jamaica	Living together	2	3
Explain the steps to be taken in casting a vote			
Name the types of elections held in Jamaica			
State the time period for General Elections in Jamaica			
Define the related concepts/terms: physical/natural environment, sustainable development, green technology, pollution, carbon emissions, toxic, non-toxic, alternative energy	Diversity, interdependence and sustainability in nature and society	3	1
Analyse patterns of production and consumption, categorise these into unsustainable and sustainable practices and devise strategies to make them sustainable			
Identify organisations that are as being certified environmentally friendly, assess their operations, gather information from other sources and then develop guidelines for other organisations to become environmentally friendly			
Assess the costs and benefits of green technology and use multiple criteria to make decisions about production and consumption			

SOCIAL STUDIES - GRADE 9			
Major Objectives	Strands/Themes	Terms	Units
Identify a problem, then design and create a green innovation to address the problem.			
Create and interpret statistical maps and diagrams showing environmental problems and solutions			
Define the terms: value, work, work ethic, job, right, responsibility, trade union, employer, employee, industrial dispute, arbitration, collective bargaining, sick out, lock out, lobbying, work to rule, strikes, career, profession	Living together	3	2
Evaluate the value of work and good work ethics			
Explain how the economy benefits when a large percentage of the labour force is employed			
Identify at least five rights and five responsibilities of individuals in the workplace			
Analyze three ways in which industrial disputes can be resolved.			
Recognise the importance of trade unions in Jamaica			
Discuss at least three laws that protect the rights of the worker			
Analyse ways in which industrial disputes can be resolved			
Define the terms: tourism, tourist, tourist attraction, tourism markets, ecotourism, community tourism, mass tourism	Living together	3	3

SOCIAL STUDIES - GRADE 9			
Major Objectives	Strands/Themes	Terms	Units
Describe the different types of tourism and tourism products in Jamaica			
Discuss the factors which influence the development of tourism in the Caribbean			
Locate the major tourist resort areas in Jamaica			
Assess the advantages and disadvantages of tourism on Jamaica's economic and social development			
Evaluate the effects of tourism on the environment			

# SCIENCE

## GRADE 7

Grade7—Science		
Themes	Number of Objectives	Major Objectives
Science Exploration, Application and Design Practice	28	22
Living things, Life Processes and the Environment	66	53
Energy, Forces and Matter	18	14
<b>Total</b>	<b>112</b>	<b>89</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

SCIENCE – GRADE 7			
Major Objectives	Themes	Units	Terms
<p>Identify specific situations in the home, classroom and science laboratory which may be potentially dangerous</p> <p>Describe ways in which potentially dangerous situations may be corrected</p> <p>Use common safety signs and symbols</p> <p>Formulate safety rules for selected working environments</p> <p>Apply safety rules to selected working environments</p> <p>Predict the consequences that may result from not following safety rules</p> <p>Use available safety equipment</p> <p>Evaluate the environmental impact relating to disposal of selected substances</p>	Science Exploration, Application and Design Practice	Working Like a Scientist	1
<p>Explain how science and technology are related.</p> <p>Describe the work of a named Jamaican and an international scientist/innovator.</p> <p>Explain the stages in the scientific method</p> <p>Apply the scientific method to formulate explanations about observed occurrences</p> <p>Write a report of a laboratory investigation.</p> <p>Explain the stages in the engineering design process</p> <p>Apply the engineering design process to solve everyday problems</p>	Science Exploration, Application and Design Practice	Working Like a Scientist	1

SCIENCE – GRADE 7			
Major Objectives	Themes	Units	Terms
<p>List the fundamental quantities and their base SI units</p> <p>Identify and correctly use instruments to measure the fundamental quantities</p>	Science Exploration, Application and Design Practice	Working Like a Scientist	1
<p>Formulate criteria for the presentation of observations /data in tabular form</p> <p>Construct data tables using agreed criteria</p> <p>Present observations /data in graphical form using accepted criteria</p> <p>Formulate criteria for representing observations as drawings/diagrams</p> <p>Make drawings/diagrams using agreed criteria</p>	Science Exploration, Application and Design Practice	Working Like a Scientist	
<p>Classify materials as solids, liquids and gases</p> <p>Demonstrate that solids and liquids are made up of tiny particles</p> <p>Relate the arrangement of tiny particles to the states of matter</p> <p>Compare the three states of matter in terms of physical properties</p> <p>Plan and design an investigation to show how matter changes state</p> <p>Formulate a working definition of matter •</p>	Energy, Forces and Matter	Nature of Matter	1
<p>Define the cell as the basic unit of structure and function of living organisms</p> <p>Examine plant and animal cells using the light microscope</p>	Living things, Life Processes and the Environment	Cells and Organisms	1



SCIENCE – GRADE 7			
Major Objectives	Themes	Units	Terms
<p>Draw and label diagrams of generalised plant and animal cells as seen under the light microscope</p> <p>Relate selected cell structures/organelles to their specific functions</p> <p>Compare the structure of typical plant and animal cells as seen under the light microscope</p> <p>Differentiate between generalized plant and animal cells</p> <p>Compare specialised plant and animal cells and state their basic functions – e.g. red blood cells transport oxygen around the body and root hair cells absorb water and mineral salts from the soil</p> <p>Define cells, tissues, organs, organ-systems and organisms and explain their hierarchical relationship</p> <p>Describe the functions of selected basic tissues, organs and organ systems (e.g. blood as tissue – transports substances)</p>			
<p>Differentiate between energy forms and energy sources/resources</p> <p>Investigate the energy conversions occurring in some devices</p> <p>Use the terms kinetic energy and potential energy in describing energy transformations.</p> <p>Differentiate between renewable and non-renewable sources/resources of energy</p> <p>Justify the need for alternative energy resources</p>	Energy, Forces and Matter	Energy	2

SCIENCE – GRADE 7			
Major Objectives	Themes	Units	Terms
<p>Assess the advantages and disadvantages of using renewable and non-renewable sources of energy</p> <p>Evaluate the importance of alternative energy solutions to Jamaica and the Caribbean</p> <p>Investigate ways in which alternative energy sources are harnessed</p>			
<p>Dissect and draw the reproductive structures of a flower</p> <p>Describe the process and list the agents of pollination</p> <p>Compare the structure of wind and insect pollinated flowers</p> <p>Explain the process of fertilisation</p> <p>Describe what happens after fertilisation to form seeds and fruits</p> <p>Relate the structure of seeds and fruits to the structure of the flower</p> <p>Make annotated drawings of the external and internal structure of seed and fruit</p> <p>Identify the main parts of a seed (testa, hilum, cotyledons, micropyle)</p>	Living things, Life Processes and the Environment	Plant Reproduction	2
<p>Identify and list some plants that can reproduce without making seeds.</p> <p>Describe ways in which new plants can be grown without seeds</p>	Living things, Life Processes and the Environment	Plant Reproduction	2

SCIENCE – GRADE 7			
Major Objectives	Themes	Units	Terms
<p>Investigate asexual reproduction in selected plants</p> <p>Compare asexual and sexual reproduction in plants</p> <p>Make and record observations using a range of methods</p>			
<p>Identify the changes in males and females during puberty</p> <p>Identify the hormones that initiate puberty in males and females</p> <p>Relate the structure of the main parts of male and female reproductive systems to their function</p> <p>Relate the structure of the male and female sex cells (gametes) to their function</p> <p>Explain the process of sexual reproduction in humans</p> <p>Describe the main changes that occur during the menstrual cycle</p> <p>Explain the importance of personal hygiene</p>	Living things, Life Processes and the Environment	Sexual Maturity, Reproduction and Personal Hygiene	2
<p>Explain the importance of responsible sexual behaviour</p> <p>Evaluate risks associated with irresponsible sexual behaviour</p> <p>Identify common diseases that are transmitted sexually (E.g. gonorrhoea, syphilis, genital herpes, HIV/AIDS, chlamydia, yeast, Human Papilloma Virus (HPV)), and their effects on the body.</p>	Living Things, Life Processes and the Environment	Sexually Transmitted Infections and Drugs	3

SCIENCE – GRADE 7			
Major Objectives	Themes	Units	Terms
<p>Identify the causative agent (pathogen), main symptoms, treatment and methods of prevention of selected STIs</p> <p>Present observations and data using appropriate methods, including tables and graphs</p> <p>Interpret observations and data</p> <p>Draw conclusions from observations, measurements and data</p>			
<p>Distinguish between drug use, misuse and abuse</p> <p>Describe the dangers and effects of commonly abused and misused drugs (alcohol, nicotine, marijuana, cocaine, caffeine, aspirin, paracetamol, antibiotics etc.)</p> <p>Explain the term drug addiction.</p> <p>Evaluate the effects of drug abuse on the human body and society.</p> <p>Explain ways in which addicted persons can be rehabilitated</p> <p>Select and make effective use of secondary sources of information about health, indicating how strongly evidence supports or does not support a conclusion</p>	Living things, Life Processes and the Environment	Sexually Transmitted Infections and Drugs	3
<p>Explain the meaning of the term 'greenhouse effect'</p> <p>Investigate the principles governing the 'greenhouse effect'</p> <p>Differentiate between the natural and manmade 'greenhouse effect'</p>	Living things, Life Processes and the Environment	Climate Change	3

SCIENCE – GRADE 7			
Major Objectives	Themes	Units	Terms
<p>Identify some effects of climate change in the Caribbean</p> <p>Identify selected greenhouse gases and their sources</p> <p>Deduce the relationship between the greenhouse effect and global warming</p> <p>Evaluate the impact of at least three effects of climate change on living organisms and the environment</p> <p>Explain ways in which human practices contribute to climate change</p> <p>Describe at least three ways in which people can reduce the impact of climate change on their lives</p> <p>Formulate plans to reduce the production of major greenhouse gases</p> <p>Interpret data which illustrates the impact of climate change</p>			

# GRADE 8

Grade 8—Science		
Themes	Number of Objectives	Number of Major Objectives
Science Exploration, Application and Design Practice	6	4
Living things, Life Processes and the Environment	67	55
Energy, Forces and Matter	47	35
<b>Total</b>	<b>120</b>	<b>94</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

SCIENCE – GRADE 8			
Major Objectives	Themes	Units	Terms
<p>Construct pie charts using findings from observations /data</p> <p>Classify variables as dependent, independent and control</p> <p>Analyse and interpret displayed data</p> <p>Annotate drawings</p>	Science Exploration, Application and Design Practice	Working Like a Scientist 2	1
<p>Recall that plants are producers and are the source of energy for animals.</p> <p>Investigate the raw materials and conditions necessary for photosynthesis, controlling relevant variables.</p> <p>Construct the word equation for photosynthesis.</p> <p>Examine the external adaptations of the leaf for photosynthesis.</p> <p>Construct terrestrial and aquatic food chains using familiar organisms.</p> <p>Create food webs using the constructed food chains.</p> <p>Explain energy flow in a food chain.</p> <p>Assess the impact of human activities on food chains and webs</p>	Living Things, Life Processes and the Environment	Photosynthesis and Energy Relationships	1
<p>Show that the Periodic Table is a collection of elements</p> <p>Match elements to their respective symbols</p> <p>Classify elements as metals or non-metals</p>	Energy, Forces and Matter	More about Matter	1

SCIENCE – GRADE 8			
Major Objectives	Themes	Units	Terms
<p>Distinguish between some selected properties of metals and non-metals</p> <p>Summarize uses of selected metals and non-metals</p> <p>Categorize the groups and periods in the Periodic Table</p> <p>Investigate the building blocks of elements (matter).</p> <p>Cite evidence for the kinetic theory of matter</p> <p>Differentiate between the sub-atomic particles in terms of their position in atom, relative mass and charge.</p> <p>Create models to represent different atoms.</p> <p>Deduce the basis for arrangement of elements on the Periodic Table.</p> <p>Identify by name, some special groups in the periodic table</p>			
<p>Differentiate between mechanical and chemical breakdown of food</p> <p>Relate the structural adaptations of human teeth to their role in the mechanical breakdown of food (mastication)</p> <p>Draw and label a longitudinal section of a canine tooth</p> <p>Evaluate different ways of taking care of the teeth</p>	<p>Living things, Life Processes and the Environment</p>	<p>Human Nutrition</p>	<p>2</p>



SCIENCE – GRADE 8			
Major Objectives	Themes	Units	Terms
<p>Describe the processes involved in human nutrition as ingestion, digestion, absorption, assimilation, and egestion.</p> <p>Investigate the presence of protein, fat, starch and simple sugars in foods</p> <p>Explain the need for proteins, fats and some carbohydrates to be broken down during digestion.</p> <p>Recognise the importance and the site of secretion of digestive juices in the alimentary canal.</p> <p>Explain the role of selected enzymes (protease, lipase and amylase) in digestion.</p> <p>Identify the final products of digestion of protein, fat and starch</p> <p>Present and interpret data in acceptable way</p> <p>Draw conclusions from observations and explain these using scientific knowledge</p>			
<p>Classify substances as pure and impure</p> <p>Explain the differences between physical and chemical changes in terms of composition, reversibility and properties</p> <p>Perform investigations to distinguish physical and chemical changes</p> <p>Infer that chemical changes lead to formation of compounds and physical changes lead to formation of mixtures</p> <p>Set up simple comparative and fair tests on the separation methods</p>	Energy, Forces and Matter	Physical and Chemical Changes	2

SCIENCE – GRADE 8			
Major Objectives	Themes	Units	Terms
<p>Develop a logical argument for classifying substances</p> <p>Differentiate between elements, mixtures and compounds</p> <p>Investigate methods that can separate mixtures</p> <p>Predict how a given mixture can be separated based on solubility, particle size and structure</p> <p>Identify industrial applications of separation techniques</p> <p>Evaluate the environmental impact of industrial separation methods</p>			
<p>Distinguish between vector and scalar quantities.</p> <p>Investigate situations in which unbalanced/ balanced forces act</p> <p>Draw conclusions about the effects of unbalanced forces</p> <p>Explain why some things are able to float in water and air, identifying all the forces involved</p> <p>Construct diagrams to show all the forces acting on moving objects, in given situations</p> <p>Perform investigations to determine how streamlined shapes influence the degree of resistance to motion in water and air</p> <p>Suggest innovative and relevant ways to solve problems</p>	Energy, Forces and Matter	Forces and Motion	2

SCIENCE – GRADE 8			
Major Objectives	Themes	Units	Terms
<p>Describe the motion of an object by its position, direction, and speed.</p> <p>Distinguish between displacement, distance, velocity, speed, and acceleration.</p> <p>Solve problems involving displacement, distance, velocity, speed, and constant acceleration.</p> <p>Show objectivity by using data and information to validate observations.</p>	Energy, Forces and Matter	Forces and Motion	2
<p>Describe the structure and basic function of the human respiratory system</p> <p>Trace the pathway of oxygen from the atmosphere to the alveoli</p> <p>Describe respiration as the process in which energy is released from food either in the presence or absence of oxygen.</p> <p>State that mitochondria are required for aerobic respiration</p> <p>Describe the exchange of oxygen and carbon dioxide across the alveoli</p> <p>Write a simple word equation to describe the process of aerobic respiration.</p> <p>Explain the importance of energy to organisms</p> <p>Distinguish between respiration and breathing.</p> <p>Perform investigations to identify the products of aerobic respiration.</p>	Living things, Life Processes and the Environment	Respiration and Gas Exchange	3

SCIENCE – GRADE 8			
Major Objectives	Themes	Units	Terms
<p>Compare photosynthesis and respiration and explain how they are linked.</p> <p>Make observations and present these in a suitable format</p> <p>Account for factors that cannot be controlled when working with living materials</p>			
<p>Construct a model of a technological tool/device needed for space exploration</p> <p>Determine the connections between the concepts universe, galaxy, and star.</p> <p>Recognise that some stars have planetary systems</p> <p>Describe, in qualitative terms, the physical characteristics of selected components of the solar system (the sun, the planets, moons, comets, asteroids, and meteoroids)</p> <p>Construct simple models and diagrams to explain eclipses of the Sun and Moon</p> <p>Explain the role of gravity in determining the motions of the planets, stars, and solar system</p> <p>Use the light year, as a unit of astronomical distance, in solving simple problems</p> <p>Formulate relevant questions about the Universe and produce correct answers to them</p>	<p>Living things, Life Processes and the Environment</p>	<p>Space Science</p>	<p>3</p>

SCIENCE – GRADE 8			
Major Objectives	Themes	Units	Terms
<p>Relate the properties of water to its uses</p> <p>Investigate selected properties of water</p> <p>Interpret data on water usage</p> <p>Describe a chemical test for water</p> <p>Justify the need for water conservation</p> <p>Summarize various methods of water conservation</p> <p>Model how water is cycled in nature.</p> <p>Investigate common methods of water purification</p> <p>Create a simple water purification device</p> <p>State the composition of clean air</p> <p>Use appropriate statistical graphs to represent the percentage composition of gases in air</p> <p>Describe the chemical tests for oxygen and carbon dioxide</p> <p>Relate the properties of the gases in air to their uses</p> <p>Describe the carbon cycle in simple terms to include the processes of combustion, respiration and photosynthesis</p> <p>Assess the impact of human activities on air and water quality</p> <p>Devise personal conservation plans</p>	<p>Living things, Life Processes and the Environment</p>	<p>Water and the Earth's Atmosphere</p>	<p>3</p>

# GRADE 9

Grade 9—Science		
Themes	Number of Objectives	Number of Major Objectives
Science Exploration, Application and Design Practice	16	14
Living things, Life Processes and the Environment	38	32
Energy, Forces and Matter	48	28
<b>Total</b>	<b>102</b>	<b>74</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

SCIENCE – GRADE 9			
Major Objectives	Themes	Units	Terms
<p>Identify and state problems</p> <p>Formulate hypotheses</p> <p>Plan and design experiments (fair tests) to solve specific problems</p>	Science Exploration, Application and Design Practice	Working Like a Scientist 3	1
<p>Recall five fundamental quantities and their base units.</p> <p>Recognise a unit as a standard measure of a quantity.</p> <p>Recognise that all other quantities and units are derived from fundamental quantities and base units.</p> <p>Use prefixes micro, milli, centi, deci, kilo, and mega appropriately and be able to carry out relevant calculations.</p> <p>Plot graphs according to accepted standards</p> <p>Calculate gradients of graphs and determine their units.</p> <p>Create and interpret distance-time and velocity-time graphs for uniform motion.</p>	Science Exploration, Application and Design Practice	Working Like a Scientist 3	1
<p>Determine the number of significant figures in the expressed value of a quantity</p> <p>Determine the number of significant figures in a calculated value</p> <p>Express measurements and calculated values to the correct number of significant figures</p> <p>Express measurements and calculated values in standard form (<math>a \times 10^n</math>)</p>	Science Exploration, Application and Design Practice	Working Like a Scientist 3	1

SCIENCE – GRADE 9			
Major Objectives	Themes	Units	Terms
Investigate the process of osmosis Explain the process of osmosis Compare osmosis with diffusion	Living things, Life Processes and the Environment	Transport in Humans and Plants	1
Identify the types of substances which need to be transported in animals. Annotate a simple diagram of the human heart. Relate the basic structure of the human heart to its function. Trace the flow of blood through the heart and around the body. Relate the structure of arteries, veins and capillaries to their functions. Identify the main components of blood and state their basic functions.	Living things, Life Processes and the Environment	Transport in Humans and Plants	1
Identify the substances that are transported in plants Describe how roots are adapted for taking in water Identify the location of transport tissues in a dicotyledonous plant stem and root sections. Describe the basic functions of the xylem and phloem. Investigate the movement of substances from the soil to the leaves	Living things, Life Processes and the Environment	Transport in Humans and Plants	1
Investigate the production of static electricity	Energy, Forces and Matter	Electricity and Magnetism	2



SCIENCE – GRADE 9			
Major Objectives	Themes	Units	Terms
Describe useful applications and hazards of static electricity			
<p>Formulate a simple working definition for the term 'electric current'</p> <p>Classify materials/substances as insulators and conductors of electricity</p> <p>Construct simple circuits using lamps, insulated wires, dry cells, switches to distinguish between series and parallel circuit</p> <p>Draw diagrams to represent series and parallel circuit</p> <p>Conduct investigations with due regard for safety</p>	Energy, Forces and Matter	Electricity and Magnetism	2
<p>Perform simple activities to identify the poles of a bar magnet</p> <p>Demonstrate that unlike poles attract and like poles repel</p> <p>Investigate the relationship between voltage (V) and current (I) in a simple series circuit</p> <p>Construct an electromagnet</p> <p>Investigate the properties of an induced current</p>	Energy, Forces and Matter	Electricity and Magnetism	2
<p>Calculate the number of each subatomic particle present in an atom/ ion</p> <p>Deduce the pattern for determining electronic configuration of first 20 elements</p> <p>Use the Octet Rule to explain why atoms bond</p>	Energy, Forces and Matter	Chemical Bonding, Formulae and Equations	2

SCIENCE – GRADE 9			
Major Objectives	Themes	Units	Terms
<p>Draw dot and cross diagrams to represent ionic bonding</p> <p>Write the formulae of simple binary compounds using symbols and valencies</p> <p>Translate word equations for simple chemical reactions into symbol equations.</p> <p>Investigate the main types of reactions</p> <p>State and apply the Law of Conservation of Mass to writing balanced equations</p> <p>Construct balanced symbol and ionic equations from given information</p>			
<p>Deduce the importance of responding to changes in the environment</p> <p>State that each sense organ contains sensory / receptor cells that detect a specific type of stimulus.</p> <p>State that the brain and spinal cord comprise the Central Nervous System (CNS) which coordinates the body's responses.</p> <p>Name the main parts of the human brain and state their basic functions.</p> <p>Differentiate between voluntary and involuntary /reflex actions.</p> <p>Explain the importance of reflex actions using examples.</p> <p>Describe the endocrine system as consisting of ductless glands that respond to internal stimuli by producing hormones.</p> <p>Identify selected endocrine glands, their location, the hormones they produce and</p>	Living things, Life Processes and the Environment	Sensitivity and Coordination	3

SCIENCE – GRADE 9			
Major Objectives	Themes	Units	Terms
<p>their importance in maintaining the internal environment</p> <p>Compare the nervous system with the endocrine system</p>			
<p>Identify common acids, alkalis and salts</p> <p>Interpret the pH scale</p> <p>Use pH paper and universal indicator solutions to determine pH of different substances</p> <p>Show that acid-base indicators change colour in acids and alkalis.</p> <p>Investigate selected reactions of acids and alkalis</p> <p>Create a safety booklet dealing with the handling of acids and alkali.</p> <p>Cite practical examples of neutralization in daily life</p> <p>Base conclusions and suggestions on evidence</p>	Energy, Forces and Matter	Acids and Alkalis	3
<p>State that the fertilised egg (zygote) undergoes repeated cell divisions to produce an embryo which becomes implanted in the uterus</p> <p>Identify key structures in a pregnant uterus (placenta, amniotic sac, amniotic fluid, umbilical cord and uterine wall) and state their basic functions in the growth and development of the human embryo/foetus.</p> <p>Describe how the embryo obtains nutrients and oxygen and eliminates waste.</p>	Living things, Life Processes and the Environment	Human Sexual Reproduction and Birth Control	3

SCIENCE – GRADE 9			
Major Objectives	Themes	Units	Terms
<p>Describe the effects of negative maternal behaviour during pregnancy on the development of the embryo/foetus.</p> <p>Explain the importance of prenatal care during pregnancy.</p> <p>Critique methods of birth control.</p> <p>Assess the importance of family planning</p> <p>Evaluate problems associated with teenage pregnancy</p> <p>Show respect for each other's views</p>			

# BIOLOGY

## GRADE 9

Biology		
Themes	Number of Objectives	Number of Major Objectives
Science Exploration, Application and Design Practice	16	14
Living things, Life Processes and the Environment	38	32
<b>Total</b>	<b>54</b>	<b>46</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

BIOLOGY – GRADE 9			
Major Objectives	Themes	Units	Terms
<p>Identify and state problems</p> <p>Formulate hypotheses</p> <p>Plan and design experiments (fair tests) to solve specific problems</p>	Science Exploration, Application and Design Practice	Working Like a Scientist 3	1
<p>Recall five fundamental quantities and their base units.</p> <p>Recognise a unit as a standard measure of a quantity.</p> <p>Recognise that all other quantities and units are derived from fundamental quantities and base units.</p> <p>Use prefixes micro, milli, centi, deci, kilo, and mega appropriately and be able to carry out relevant calculations.</p> <p>Plot graphs according to accepted standards</p> <p>Calculate gradients of graphs and determine their units.</p> <p>Create and interpret distance-time and velocity-time graphs for uniform motion.</p>	Science Exploration, Application and Design Practice	Working Like a Scientist 3	1
<p>Determine the number of significant figures in the expressed value of a quantity</p> <p>Determine the number of significant figures in a calculated value</p> <p>Express measurements and calculated values to the correct number of significant figures</p> <p>Express measurements and calculated values in standard form (<math>a \times 10^n</math>)</p>	Science Exploration, Application and Design Practice	Working Like a Scientist 3	1

Investigate the process of osmosis Explain the process of osmosis Compare osmosis with diffusion	Living things, Life Processes and the Environment	Transport in Humans and Plants	1
Identify the types of substances which need to be transported in animals.  Annotate a simple diagram of the human heart.  Relate the basic structure of the human heart to its function.  Trace the flow of blood through the heart and around the body.  Relate the structure of arteries, veins and capillaries to their functions.  Identify the main components of blood and state their basic functions.	Living things, Life Processes and the Environment	Transport in Humans and Plants	1
Identify the substances that are transported in plants  Describe how roots are adapted for taking in water  Identify the location of transport tissues in a dicotyledonous plant stem and root sections.  Describe the basic functions of the xylem and phloem.  Investigate the movement of substances from the soil to the leaves	Living things, Life Processes and the Environment	Transport in Humans and Plants	1
Deduce the importance of responding to changes in the environment  State that each sense organ contains sensory / receptor cells that detect a specific type of stimulus.	Living things, Life Processes and the Environment	Sensitivity and Coordination	2

<p>State that the brain and spinal cord comprise the Central Nervous System (CNS) which coordinates the body's responses.</p> <p>Name the main parts of the human brain and state their basic functions.</p> <p>Differentiate between voluntary and involuntary /reflex actions.</p> <p>Explain the importance of reflex actions using examples.</p> <p>Describe the endocrine system as consisting of ductless glands that respond to internal stimuli by producing hormones.</p> <p>Identify selected endocrine glands, their location, the hormones they produce and their importance in maintaining the internal environment</p> <p>Compare the nervous system with the endocrine system</p>			
<p>State that the fertilised egg (zygote) undergoes repeated cell divisions to produce an embryo which becomes implanted in the uterus</p> <p>Identify key structures in a pregnant uterus (placenta, amniotic sac, amniotic fluid, umbilical cord and uterine wall) and state their basic functions in the growth and development of the human embryo/foetus.</p> <p>Describe how the embryo obtains nutrients and oxygen and eliminates waste.</p> <p>Describe the effects of negative maternal behaviour during pregnancy on the development of the embryo/foetus.</p> <p>Explain the importance of prenatal care during pregnancy.</p>	<p>Living things, Life Processes and the Environment</p>	<p>Human Sexual Reproduction and Birth Control</p>	<p>3</p>



<p>Critique methods of birth control.</p> <p>Assess the importance of family planning</p> <p>Evaluate problems associated with teenage pregnancy</p> <p>Show respect for each other's views</p>			
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# CHEMISTRY

## GRADE 9

Chemistry		
Themes	Number of Objectives	Number of Major Objectives
Science Exploration, Application and Design Practice	16	14
Energy, Forces and Matter	37	21
<b>Total</b>	<b>53</b>	<b>35</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

CHEMISTRY – GRADE 9			
Major Objectives	Themes	Units	Terms
<p>Identify and state problems</p> <p>Formulate hypotheses</p> <p>Plan and design experiments (fair tests) to solve specific problems</p>	Science Exploration, Application and Design Practice	Working Like a Scientist 3	1
<p>Recall five fundamental quantities and their base units.</p> <p>Recognise a unit as a standard measure of a quantity.</p> <p>Recognise that all other quantities and units are derived from fundamental quantities and base units.</p> <p>Use prefixes micro, milli, centi, deci, kilo, and mega appropriately and be able to carry out relevant calculations.</p> <p>Plot graphs according to accepted standards</p> <p>Calculate gradients of graphs and determine their units.</p> <p>Create and interpret distance-time and velocity-time graphs for uniform motion.</p>	Science Exploration, Application and Design Practice	Working Like a Scientist 3	1
<p>Determine the number of significant figures in the expressed value of a quantity</p> <p>Determine the number of significant figures in a calculated value</p> <p>Express measurements and calculated values to the correct number of significant figures</p> <p>Express measurements and calculated values in standard form (<math>a \times 10^n</math>)</p>	Science Exploration, Application and Design Practice	Working Like a Scientist 3	1

CHEMISTRY – GRADE 9			
Major Objectives	Themes	Units	Terms
<p>Identify at least five chemists and outline their contributions to the development of Chemistry.</p> <p>Use appropriate apparatus to measure quantities such as volume, mass and temperature</p>	Energy, Forces and Matter	Introduction to Chemistry	1
<p>Calculate the number of each subatomic particle present in an atom/ion</p> <p>Deduce the pattern for determining electronic configuration of first 20 elements</p> <p>Use the Octet Rule to explain why atoms bond</p> <p>Draw dot and cross diagrams to represent ionic bonding</p> <p>Write the formulae of simple binary compounds using symbols and valencies</p> <p>Translate word equations for simple chemical reactions into symbol equations.</p> <p>Investigate the main types of reactions</p> <p>State and apply the Law of Conservation of Mass to writing balanced equations</p> <p>Construct balanced symbol and ionic equations from given information</p>	Energy, Forces and Matter	Chemical Bonding, Formulae and Equations	2
<p>Identify common acids, alkalis and salts</p> <p>Interpret the pH scale</p>	Energy, Forces and Matter	Acids, Alkalis and Salts	3

CHEMISTRY – GRADE 9			
Major Objectives	Themes	Units	Terms
<p>Use pH paper and universal indicator solutions to determine pH of different substances</p> <p>Show that acid-base indicators change colour in acids and alkalis.</p> <p>Investigate selected reactions of acids and alkalis</p> <p>Create a safety booklet dealing with the handling of acids and alkali.</p> <p>Distinguish between soluble and insoluble salts</p> <p>Prepare an insoluble salt</p> <p>Cite practical examples of neutralization in daily life</p> <p>Base conclusions and suggestions on evidence</p>			

# PHYSICS

## GRADE 9

Physics		
Themes	Number of Objectives	Number of Major Objectives
Science Exploration, Application and Design Practice	25	22
Energy, Forces and Matter	26	17
<b>Total</b>	<b>51</b>	<b>39</b>

*N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.*

PHYSICS – GRADE 9			
Major Objectives	Themes	Units	Terms
<p>Identify and state problems</p> <p>Formulate hypotheses</p> <p>Plan and design experiments (fair tests) to solve specific problems</p>	Science Exploration, Application and Design Practice	Working Like a Scientist 3	1
<p>Recall five fundamental quantities and their base units.</p> <p>Recognise a unit as a standard measure of a quantity.</p> <p>Recognise that all other quantities and units are derived from fundamental quantities and base units.</p> <p>Use prefixes micro, milli, centi, deci, kilo, and mega appropriately and be able to carry out relevant calculations.</p> <p>Plot graphs according to accepted standards</p> <p>Calculate gradients of graphs and determine their units.</p> <p>Create and interpret distance-time and velocity-time graphs for uniform motion.</p>	Science Exploration, Application and Design Practice	Working Like a Scientist 3	1
<p>Determine the number of significant figures in the expressed value of a quantity</p> <p>Determine the number of significant figures in a calculated value</p> <p>Express measurements and calculated values to the correct number of significant figures</p> <p>Express measurements and calculated values in standard form (<math>a \times 10^n</math>)</p>	Science Exploration, Application and Design Practice	Working Like a Scientist 3	1
<p>Formulate a simple working definition for the term area</p>	Science Exploration, Application and Design Practice	Measuring Length Derived Units	1

PHYSICS – GRADE 9			
Major Objectives	Themes	Units	Terms
<p>Formulate a simple working definition for the term volume</p> <p>Use appropriate units for area and volume</p> <p>Calculate the area of regular shapes</p> <p>Estimate the area of irregular shapes</p> <p>Calculate the volume of regular shaped objects</p> <p>Determine the volume of irregular shaped objects</p> <p>Justify selection of methods used to determine area and volume in particular situations</p>			
<p>Investigate the production of static electricity</p> <p>Describe useful applications and hazards of static electricity</p>	Energy, Forces and Matter	Electricity and Magnetism	2
<p>Formulate a simple working definition for the term ‘electric current’</p> <p>Classify materials/substances as insulators and conductors of electricity</p> <p>Construct simple circuits using lamps, insulated wires, dry cells, switches to distinguish between series and parallel circuit</p> <p>Draw diagrams to represent series and parallel circuit</p> <p>Conduct investigations with due regard for safety</p>	Energy, Forces and Matter	Electricity and Magnetism	2
<p>Perform simple activities to identify the poles of a bar magnet</p>	Energy, Forces and Matter	Electricity and Magnetism	2



PHYSICS – GRADE 9			
Major Objectives	Themes	Units	Terms
<p>Demonstrate that unlike poles attract and like poles repel</p> <p>Investigate the relationship between voltage (V) and current (I) in a simple series circuit</p> <p>Construct an electromagnet</p> <p>Investigate the properties of an induced current</p>			
<p>Recall that temperature determines the direction of thermal energy transfer</p> <p>Investigate physical properties which vary with temperature</p> <p>Compare the transfer of thermal energy by conduction, convection and radiation</p> <p>Investigate the absorption and emission of thermal energy by materials</p> <p>Construct a device that utilises the principles of thermal energy transfer</p>	Energy, Forces and Matter	Thermal Physics	3

# LANGUAGE ARTS

## GRADE 7

Grade 7—Language Arts		
Strands	Number of Objectives	Number of “major” objectives
Listening and Speaking	22	7
Fluency and Recognition (Word Recognition & Vocabulary Development)	15	8
Reading for Meaning and Enjoyment (Comprehension & Literature)	23	15
Language Structure (Grammar and Conventions)	17	13
Reading for Information (Research and Study Skills)	19	7
Communication (Writing)	17	13
<b>Total</b>	<b>113</b>	<b>63</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

LANGUAGE ARTS – GRADE 7			
Major Objectives	Strands	Terms	Units
Distinguish between the use of specific SJE/JC structures	Listening and Speaking	1	1& 2
Listen and evaluate a speakers' message whether explicitly stated or implied		1	1
Use appropriate nonverbal indicators of active listening, including maintaining eye contact, and nodding		1	1
Extract main ideas from a speaker's presentation		1	2
Differentiate between fact and opinion in oral communication		2	1
Evaluate the appropriateness of language form selected with reference to audience, context and purpose		2	2
Use a mix of SJE and JC where appropriate and effective		3	1
Apply phonics skilfully skills to read words with silent consonants (e.g. h, b, gh) and letter strings starting with varying sounds	Fluency and Recognition (Word Recognition and Vocabulary Development)	1	1
Identify root words and use these as clues to meaning		1	1
Recognize key words by applying specific word recognition clues including the use of affixes and context	Fluency and Recognition (Word Recognition and Vocabulary Development)	1 2	2 1
Recognize and read grade-appropriate irregularly spelt words		2	1&2
Apply a variety of spelling and pronunciation rules in decoding unfamiliar vocabulary in isolation and in context		2	2

LANGUAGE ARTS – GRADE 7			
Major Objectives	Strands	Terms	Units
Use varying levels of context as clue to identify, extract and clarify the meaning of words	Reading for Meaning and Enjoyment (Comprehension/Literature)	3	1
Use syntactic clues focusing on word order, grammar and the natural sense of language flow to decipher unfamiliar words		3	1
Review and apply knowledge of connotation and denotation to determine the meaning of words.		1	1
Identify main ideas and supporting details in prose, poetry and excerpts from printed media.		1	1
Identify the elements of different genres of texts, including poetry, narratives, drama		1	2
Extract and interpret information presented at the literal, inferential and critical levels		1	2
Use the information emerging from prose, poetry, songs etc. to make inferences /Deduction		1	2
Use various strategies to extract meaning from texts e.g. self-question/use of metacognitive strategies		1	2
Identify and use rhymes and onomatopoeia / onomatopoeic expressions to create vibrant and engaging poems		2	1
Identify and comment on the use of rhythm to create impact		2	1
Identify and analyse the use of alliteration to create rhythm and add impact to poetry	Reading for Meaning and Enjoyment	2	1

LANGUAGE ARTS – GRADE 7			
Major Objectives	Strands	Terms	Units
Identify and analyse major and minor themes in poetry and prose	(Comprehension/Literature)	3	1
Analyse a variety of narrative texts to determine how the setting contributes to meaning and may impact reader response		3	1
Identify and evaluate the use of metaphor in poetry		3	1
Explain interpretations of increasingly complex or difficult texts using stated and implied ideas from the texts to support their interpretations		3	1
Infer main idea from both narrative and expository texts		3	1
Infer the author's purpose/ intent (e.g. to inform, entertain, or explain) in a variety of Texts			
Analyse a variety of narratives and explain how the element of plot contributes to meaning and may impact reader response			
Use text features, such as chapter titles, headings and subheadings parts of books, including the index, appendix and table of contents and online tools (search engines) to locate information	Reading for Information (Research and Study Skills)	1	1
Analyze and explain how specific organizational aids or external text features such as titles, sub-titles/subheadings guide the understanding of texts		1	1
Use external text features (tables, graphs, pictures, diagrams) to retrieve and synthesize information from a variety of Sources.		1	2

LANGUAGE ARTS – GRADE 7			
Major Objectives	Strands	Terms	Units
Assess meaningfulness of various sources of information, based on relevance to research focus	Reading for Information (Research and Study Skills)	1	2
Apply the use of internal text structures/features to set out information retrieved in response to a particular question or topic		2	2
Prepare a research outline for a written presentation of a research project		2	2
Prepare and deliver oral reports / presentations of research processes and findings		3	1
Use different sentence structure combinations as appropriate to different functions and types of writing	Language Structure (Grammar and Conventions)	1	1
Select and use effectively, different punctuation marks for different writing functions (comma, exclamation)		1	1
Use collective nouns appropriately in a range of written forms		1	2
Use, with increasing skill and accuracy, punctuation marks such as colon and semicolon		1	2
Use transitional words to edit and add clarity to their own writing and that of others		2	1
Use the continuous tense of the verb appropriately in a range of written forms		2	1
Demonstrate an understanding of subject/verb agreement in structures		2	1

LANGUAGE ARTS – GRADE 7			
Major Objectives	Strands	Terms	Units
where the subject is a Unit of Measurement	Language Structure (Grammar and Conventions)	2	2
Use quotation marks to represent direct and indirect speech and to add clarity to their reading and writing		2	2
Use the past tense form of verbs appropriately in a range of written forms		2	2
Identify and use correct subject-verb agreement for singular and plural indefinite pronouns.		2	2
Identify and use correct subject – verb agreement for countable and uncountable nouns		2	2
Construct simple and compound sentences which incorporate correct subject –verb agreement for singular and plural forms of indefinite pronouns		3	1
Construct sentences using correct subject verb agreement in sentences where the subjects are joined by the words or/nor			
Use friendly letter format to compose apology letters for a variety of purposes	Communication (Writing)	1	1
Use business letter format to compose business letters for a variety of purposes		1	2
Use knowledge of paragraph development to create vibrant and engaging compositions		1	2
Compose descriptive pieces to convey / depict information and ideas for a range of purposes		2	1
Write with increasing competence in Standard Jamaican English using appropriate structures and mechanics		2	1

LANGUAGE ARTS – GRADE 7			
Major Objectives	Strands	Terms	Units
Source and categorize descriptive pieces according to their organizational strategy	Communication (Writing)	2	2
Sequence descriptions according to order of importance, chronological and spatial ordering.		2	2
Use words skilfully to create particular mood/atmosphere.		2	2
Outline and explain the major story elements in a range of narratives.		2	2
Plot stories using a variety of graphic organisers		2	2
Establish a distinctive voice in their writing appropriate to the subject and audience		3	1
Use a range of methods including descriptions and dialogue to generate engaging story openings		3	1
Use knowledge of descriptions to write interesting stories which are based on given themes.		3	1



**GRADE 8**

Grade 8—English Language /Literature		
Strands	Number of Objectives	Number of “major” objectives
Listening and Speaking	10	5
Fluency and Recognition (Word Recognition & Vocabulary Development)	20	7
Reading for Meaning and Enjoyment (Comprehension & Literature)	23	12
Language Structure (Grammar and Conventions)	15	9
Reading for Information (Research and Study Skills)	24	11
Communication (Writing)	15	12
<b>Total</b>	<b>107</b>	<b>56</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

ENGLISH LANGUAGE/LITERATURE – GRADE 8			
Major Objectives	Strands	Terms	Units
Effectively speak in response to other's points of view using appropriate language, for example, asking and generating questions or challenging ideas	Listening and Speaking	1	1
Use problem solving techniques in discussing varying issues using appropriate forms of language		2	1
Critically respond to visual and aural stimuli by paying attention to the impact of particular features such as tone and detail presented in each		3	1
Listen and critically respond to ideas presented by speakers		3	1
Apply Communication Protocol in different oral activities		3	1
Use context clues to aid in word recognition (explanation and gist clues)	Fluency and Recognition (Word Recognition & Vocabulary Development)	2	1
Apply word recognition strategies such as re-reading and reading ahead to identify new words		2	1
Create appropriate sentences using the vocabulary words learnt from texts		2	2
Use various sources of semantic cues to unlock meaning of unknown words.		3	1
Use syntactic cues to decode and decipher meaning of unknown/unfamiliar vocabulary		3	1
Distinguish between the denotative and connotative meanings of words.		1	1
Practice and apply the concept of connotation		1	1
Determine a central idea of a text and analyse its development over the course	Reading for Meaning and Enjoyment	1	1

ENGLISH LANGUAGE/LITERATURE – GRADE 8			
Major Objectives	Strands	Terms	Units
of the text, including its relationship to supporting ideas	(Comprehension & Literature)		
Compare and contrast the elements and authors of various literary genres (e.g. short story, novel, drama, fable, fantasy, biography, documentary, poetry, and science-fiction).		1	1
Infer the author's point of view and purpose from text read.		1	2
Locate and analyse an author's use of figurative language including allusion, idiom, pun and symbolism in a variety of literary text.		1	2
Compose a summary of a text, using main ideas identified		1	2
Analyse the author's style, word choice, and language structure used in relation to determining point of view versus view point (opinion)		2	1
Analyse poetry to identify and comment on the effectiveness of the use of the ballad and free verse poetic forms		2	2
Determine the effects of technical elements of drama such as scenery, costumes, props and other stimuli on making meaning		2	2
Use deduction and inference to interpret information and ideas and to predict outcomes		3	1
Defend inferences about point of view using textual evidence		2	2
Use sensory details to categorise and analyse imagery in a range of written texts.		3	1

ENGLISH LANGUAGE/LITERATURE – GRADE 8			
Major Objectives	Strands	Terms	Units
Analyse the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.		2	2
Identify and use different phrases (noun phrase, verb phrase, prepositional phrases)	Language Structure (Grammar and Conventions)	1	1
Differentiate between independent and dependent clauses		1	1
Construct sentences using both dependent and independent clauses		1	1
Identify and use clauses - adverbial, adjectival and noun		1	2
Compose passages with different types of clauses		1	2
Rewrite sentences changing the voice from active to passive and vice versa		2	2
Rewrite sentences changing the voice from active to passive and vice versa		2	2
Recognise pronoun antecedent agreement in number, person and gender		2	2
		2	2
Improve the clarity of different pieces of writing by inserting phrases enclosed by commas, dashes and/or parentheses Use correctly, the ellipsis, semi-colon, colon, full stop, hyphen and exclamation mark in a wide range of texts		3	1
Analyse topics to ascertain areas for focused research	Reading for Information (Research and Study Skills)	1	1
Formulate questions about a topic to guide focused research		1	1
Supply examples of intellectual property based on the definition of the concept		1	1

ENGLISH LANGUAGE/LITERATURE – GRADE 8			
Major Objectives	Strands	Terms	Units
Highlight the implications of plagiarism			
Explain the various ways in which plagiarism can be prevented.		1	1
Distinguish between credible and non-credible sources		1	1
Retrieve information from selected sources and assess how accurate/reliable these sources are		1	2
Define and categorize the various documentation styles according to the context in which each is used		1	2
Determine the effectiveness of examples of in-text citations in given materials.		2	2
Produce their own paragraphs using in-text citation appropriately (including direct quotation)		2	2
Synthesize the skills of gathering information to produce individual/group mini research incorporating sources, cited relevantly and accurately using the APA format		2	2
		3	1
Compose business letters to complain about and order goods or services	Communication (Writing)	1	1
Identify the elements of plot structure in a range of narrative pieces		1	1
Analyze and compose several short stories to demonstrate understanding of plot structure.		2	1
Use varied sentence types to construct paragraphs		1	1
Know and use various types of transitional words (exemplification or illustration) to connect ideas: general/specific order		1	1

ENGLISH LANGUAGE/LITERATURE – GRADE 8			
Major Objectives	Strands	Terms	Units
Know and use various types of transitional words (compare and contrast) to connect ideas: general/specific order		1	2
Differentiate between 'persuasive techniques' and 'presentational devices'		2	2
Interpret the use of various persuasive techniques in advertisement		2	2
Use persuasive techniques to convince various audiences through advertisements		2	2
Apply persuasive techniques to their writing in order to achieve a specific purpose		3	1
Use presentational devices to enhance the appeal of their work		3	1

# GRADE 9

Language Arts		
Strands	Number of Objectives	Number of “major” objectives
Listening and Speaking	25	8
Fluency and Recognition (Word Recognition & Vocabulary Development)	16	5
Reading for Meaning and Enjoyment (Comprehension & Literature)	20	7
Language Structure (Grammar and Conventions)	18	12
Reading for Information (Research and Study Skills)	16	9
Writing	18	9
<b>Total</b>	<b>113</b>	<b>50</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

LANGUAGE ARTS – GRADE 9			
Major Objectives	Strands	Terms	Units
Analyse and comment on the effectiveness of the language devices/ techniques used by the speaker	Listening and Speaking	2	1
Listen and respond to materials, oral presentations, expressing opinion on what has been said		1	1
Establish and sustain a logical viewpoint		1	2
Prepare and deliver speeches (debate, panel discussion) appropriately and creatively using SJE and JC.		1	1
Identify examples of code -switching and comment on their purpose and impact		1	1
Listen to determine purpose for use of particular language forms		1	2
Practise strategies for good listening		1	2
Speak fluently in a variety of situations for a variety of purposes and audiences		2	2
Use context clues to determine the most appropriate definition for words with multiple meanings	Fluency and Recognition	1	1
Categorise words according to shades of meaning	(Word Recognition & Vocabulary Development)	1	2



LANGUAGE ARTS – GRADE 9			
Major Objectives	Strands	Terms	Units
Use context clues to decipher meaning and supply omitted information		1	2
Use the connotative meaning of words to infer the implicit messages in text		2	1
Recognize and use appropriately, patterns of word change (analyze, analysis, analytic, analytical)		2	2
Use various strategies to extract meaning from texts e.g. paraphrasing, re-reading, linking ideas, connecting events.	Reading for Meaning and Enjoyment (Comprehension & Literature)	2	1
Identify main ideas and supporting details in stories, or two novels, or two poems and analyze for similarities and differences in each genre		1	1
Compare and contrast the thematic concerns in two stories/novels/poems using evidence from the texts		1	1
Respond to the use of sensory details in different genres of texts		1	1
Explain the effectiveness of a writer's use of various elements of literature to add meaning to his work		1	1
Explain the effects of language devices used in prose, poetry and drama and how these devices add to the meaning, themes, setting and atmosphere of the works presented		1	2
Explain the effects of language devices used in prose, poetry and drama and how these devices add to the meaning, themes, setting and atmosphere of the works presented		2	1

LANGUAGE ARTS – GRADE 9			
Major Objectives	Strands	Terms	Units
Determine a writer's point of view / purpose based on ideas/arguments presented	Reading for Meaning and Enjoyment (Comprehension & Literature)	3	1
Examine relationships between the themes arising from texts studied to situations in modern society and comment on how the devices create an impact on the events portrayed		2	2
Form more complex sentences by using conjunctions and connectives to extend ideas	Language Structure (Grammar and Conventions)	1	1
Make distinctions between a dependent and an independent clause		1	1
Use accurate subject/verb agreement		1	1
Analyze language errors and make adjustments		1, 2 & 3	1 & 2
Use correctly, subject and object forms of pronouns		1	1
Use articles appropriately to modify nouns and noun phrases		1	1
Use different sentence structures to suit context and purpose.		2	1
Use adjectival clauses to extend ideas.		2	1
Use appropriately, punctuation and	Language Structure (Grammar and Conventions)	2 & 3	1 & 2

LANGUAGE ARTS – GRADE 9			
Major Objectives	Strands	Terms	Units
capitalization to satisfy conventions of writing		2	1
Apply the use of punctuation marks in order to add meaning or to create impact		2	2
Use adverbial clauses to extend ideas		3	1
Analyze the effects created by the presence or absence of various punctuations			
Explain/demonstrate the use of external text features in synthesizing information from one or more texts	Reading for Information (Research and Study Skills)	1	1
Write proper in-text citations for a variety of sources		1 & 2	1 & 2
Use the APA documentation style to prepare reference lists that highlight materials cited in written work		1 & 2	1 & 2
Prepare and use a variety of data collection instruments to collect information		1	1
Use external text features to make written work easily accessible and usable		1	2
Apply the use of internal text structures to organize information	Reading for Information (Research and Study Skills)	2	1
Use various types of graphic organisers to show the relationship between ideas and information collected from various sources		2	2

LANGUAGE ARTS – GRADE 9			
Major Objectives	Strands	Terms	Units
Analyze and combine data from various sources to support facts and opinions based on research		2	2
Convert graphic research data into narratives		3	1
Compose descriptive texts, giving attention to the uses of sensory details and figurative devices	Communication (Writing)	1	1
Use figurative devices appropriately to add appeal to texts		1, 2 & 3	1 & 2
Use a range of narrative techniques such as flashback, foreshadowing, humour and irony twist to produce engaging stories		1	2
Compose business letters/emails displaying more sophistication in language style and selecting a range of acceptable formats		2	1
Formulate simple reports giving special attention to critical details, organization and format	Communication (Writing)	2	1
Write to persuade, using appropriate techniques such as: rhetorical questions, bandwagon appeal, testimonials.		2	2
Establish a stance in an argument and develop strong arguments to support a position		2	2
Compose speeches, giving attention to diction, persuasive techniques such as repetition, rhetorical questions		2	2
Create advertisements, using emotional appeals and persuasive techniques		2	2

# HEALTH AND FAMILY LIFE EDUCATION

## GRADE 7

Grade 7—HFLE		
Themes	Number of Objectives	Number of “major” objectives
Self and Interpersonal Relationship	53	7
Safety and Security	51	5
Sexuality and Sexual Health	39	5
Appropriate Eating and Fitness	26	2
Managing the Environment	35	4
<b>TOTAL</b>	<b>204</b>	<b>23</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

HEALTH AND FAMILY LIFE EDUCATION – GRADE 7			
Major Objective	Themes/Modules	Terms	Units
Express an awareness of the various influence on development of the adolescent's life cycle	Self and Interpersonal Relationship/Understanding Self	1	1
Display commitment towards developing positive traits	Self and Interpersonal Relationship/Understanding self	1	1
Display willingness to support people who are different from you		1	1
Justify the importance of self-acceptance		1	1
Demonstrate increased respect and tolerance for others in everyday life situation		1	1
Compare feelings about different experiences. Show a willingness to express their feelings without causing harm to self and others.	Self and Interpersonal Relationship/Coping with Risk and adversity	1	2

HEALTH AND FAMILY LIFE EDUCATION – GRADE 7			
Major Objective	Themes/Modules	Terms	Units
Assess strategies for handling personal conflicts	Self and Interpersonal Relationship/Coping with risk and Adversity	1	1
Show willingness and commitment to advocate for the rights of the children.	Safety and Security/Explore Concepts of Protection	1	1
Exhibit commitment to practise tips to stay safe on social media	Safety and Security/Factors Influencing Behaviours Related to Safety and Security	1	1
Display commitment towards developing positive digital footprints		1	1
Justify the importance of reporting abuse		1	2
Show a willingness to display proactive approaches to mitigate against gang activities		1	2

HEALTH AND FAMILY LIFE EDUCATION – GRADE 7			
Major Objective	Themes/Modules	Terms	Units
Display coping mechanisms to manage changes experienced during puberty	Sexuality and Sexual Health/Differentiating between sex and sexuality	2	1
Justify why an understanding of human sexuality is important to their personal development		2	2
Promote healthy expressions of sexuality in a manner that shows self-respect	Sexuality and Sexual Health/Sociocultural Influences and Sexual Behaviours	2	1
Advocate for peers to practise social media responsibility to ensure their safety and safety of others		2	1
Justify the importance of abstaining from sexual activity to delay parenting	Sexuality and Sexual Health/Managing Reproductive Health	2	1



HEALTH AND FAMILY LIFE EDUCATION – GRADE 7			
Major Objective	Themes/Modules	Terms	Units
Justify the importance of making changes in diet and physical inactivity to achieve health lifestyle outcomes	Appropriate Eating and Fitness/Making Healthy Choices	3	1
Justify the importance of handwashing to protect themselves from acquiring a food borne illness		3	1
Display a commitment to reduce the impact of their carbon footprint	Managing the Environment/Maintaining my Environment	3	1
Justify the importance of adhering to laws and policies related to environmental protection.	Managing the Environment/Environmental Threats	3	1
Display a willingness to commit to a reduction in behaviours that	Managing the Environment/Environmental Threats	3	1

HEALTH AND FAMILY LIFE EDUCATION – GRADE 7			
Major Objective	Themes/Modules	Terms	Units
contribute to the prevalence of mosquitoes			
Justify the importance of maintaining rivers, beaches, gullies and drains	Managing the Environment/Health and Wealth	3	1

# GRADE 8

Grade 8—HFLE		
Themes	Number of Objectives	Number of “major” objectives
Self and Interpersonal Relationships	47	8
Safety and Security	65	12
Sexuality and Sexual Health	44	9
Appropriate Eating & Fitness	34	6
Managing the Environment	40	4
<b>TOTAL</b>	<b>230</b>	<b>39</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

HEALTH AND FAMILY LIFE EDUCATION – GRADE 8			
Major Objectives	Theme/Modules	Terms	Units
Demonstrate social skills to develop positive, supportive relationships	Self and Interpersonal Relationships/ Understanding Self	1	1
Demonstrate willingness to participate in activities that will improve their resilience	Self and Interpersonal Relationships/ Understanding Self	1	1
Differentiate between positive and negative qualities in a relationship	Self and Interpersonal Relationships/ Understanding Self	1	2
Explain why ‘self-injury’ is an unhealthy coping strategy	Self and Interpersonal Relationship/ Coping with Risk and Adversity	2	1
Promote responsible behaviours among their peers that reduce the risk of substance use	Self and Interpersonal Relationship/ Coping with Risk and Adversity	2	1
Explore appropriate responses to situations that may be difficult to cope with	Self and Interpersonal Relationship/ Coping with Risk and Adversity	3	1

HEALTH AND FAMILY LIFE EDUCATION – GRADE 8			
Major Objectives	Theme/Modules	Terms	Units
Develop appropriate strategies to manage hurtful behaviours	Self and Interpersonal Relationship/ Coping with Risk and Adversity	2	1
Justify the importance of collaboration and cooperation to sustainable development of the region	Self and Interpersonal Relationship/ Respect and Tolerance for Self and Others	2	1
Explore their rights and responsibilities in relation to safety and security of self and others	Safety and Security/ Exploring Concepts of Protection, Safety and Security	1	1
Practise responsible and respectful behaviours in online communities	Safety and Security/ Exploring Concepts of Protection, Safety and Security	1	1
Explore strategies that ensure personal safety and security of self and others	Safety and Security/ Exploring Concepts of Protection, Safety and Security	2	2

HEALTH AND FAMILY LIFE EDUCATION – GRADE 8			
Major Objectives	Theme/Modules	Terms	Units
Recognize actions or behaviours that constitute bullying	Safety and Security/ Exploring Concepts of Protection, Safety and Security	2	2
Critically analyse the causes and effects of trafficking in persons	Safety and Security/ Exploring Concepts of Protection, Safety and Security	2	2
Examine the psychological effects of cyberbullying	Safety and Security/ Factors Influencing Behaviours Related to Safety and Security	2	1
Challenge negative social norms in relation to violence, safety and security	Safety and Security/ Factors Influencing Behaviours Related to Safety and Security	1 & 2	1
Explore civil duties as a citizen of Jamaica to protect and serve the country	Safety and Security/ Factors Influencing Behaviours Related to Safety and Security	2 & 3	2

HEALTH AND FAMILY LIFE EDUCATION – GRADE 8			
Major Objectives	Theme/Modules	Terms	Units
Assess their personal risk and vulnerability towards gang involvement	Safety and Security/ Safeguards for Protection, Safety and Security	1	1
Demonstrate social or cognitive skills to avoid involvement in gangs and gang related activities	Safety and Security/ Safeguards for Protection, Safety and Security	2	1
Summarize the roles and responsibilities of individuals and agencies in managing mass casualty situations	Safety and Security/ Safeguards for Protection, Safety and Security	2&3	2
Access information and services to address issues related to Protection, Safety and Security	Safety and Security/ Safeguards for Protection, Safety and Security	1 & 2	3
Distinguish between myths and facts about sexuality	Sexuality and Sexual Health/ Differentiating Between Sex and Sexuality	1	1
Demonstrate the ability to use social or coping	Sexuality and Sexual Health/	2	1

HEALTH AND FAMILY LIFE EDUCATION – GRADE 8			
Major Objectives	Theme/Modules	Terms	Units
skills to respond to sexual harassment and sexual abuse	Differentiating Between Sex and Sexuality		
Critically examine the impact of socio-cultural influences on sexuality	Sexuality and Sexual Health/ Factors that Influence the Expression of Human Sexuality	3	1
Demonstrate the ability to use coping or cognitive skills to manage harmful content on social media.	Sexuality and Sexual Health/ Factors that Influence the Expression of Human Sexuality	1	1
Display respect for peers who express a desire to participate in activities that differ from traditional gender norms	Sexuality and Sexual Health/ Sociocultural Influences on Sexual Behaviour	1, 2&3	2
Differentiate the modes of transmission, symptoms and treatment of sexually transmitted infections	Sexuality and Sexual Health/ Managing Reproductive Health	1	1



HEALTH AND FAMILY LIFE EDUCATION – GRADE 8			
Major Objectives	Theme/Modules	Terms	Units
Evaluate the consequences associated with adolescent pregnancy and child-rearing	Sexuality and Sexual Health/ Managing Reproductive Health	1 & 2	1
Show respect for their bodies by exercising proper health and hygiene practices during adolescence	Sexuality and Sexual Health/ Managing Reproductive Health	3	2
Critically examine how laws protect the rights of children	Sexuality and Sexual Health/ Access Sources of Health Information and Services	1	1
Show willingness to commit to improving their eating habits	Appropriate Eating & Fitness/ Access Sources of Health Information and Services	1	1
Investigate the relationship between nutrients and healthy functioning of the body	Appropriate Eating & Fitness/ Access Sources of Health Information and Services	1	1

HEALTH AND FAMILY LIFE EDUCATION – GRADE 8			
Major Objectives	Theme/Modules	Terms	Units
Practise safety precautions and preservation principles when handling food	Appropriate Eating & Fitness/ Making Healthy Choices	1	2
Demonstrate the ability to use cognitive or coping skills to maintain a healthy lifestyle	Appropriate Eating & Fitness/ Making Healthy Choices	2 &3	1
Examine the components of a healthy lifestyle	Appropriate Eating & Fitness/ Good Health and Quality Living	1	1
Distinguish between social, emotional and economic factors that influence eating and fitness habits	Appropriate Eating & Fitness/ Factors Influencing Eating and Fitness	1 &2	1
Explain the relationship between lifestyle diseases and poor eating and fitness habits	Appropriate Eating & Fitness/ Factors Influencing Eating and Fitness	2&3	1
Examine how human behaviour has negatively impacted the natural environment of the country	Managing the Environment/ Preserving	1	1

HEALTH AND FAMILY LIFE EDUCATION – GRADE 8			
Major Objectives	Theme/Modules	Terms	Units
	Jamaica's Natural Environment		
Employ social skills or cognitive skills to encourage others to use proper methods of garbage disposal	Managing the Environment/ Maintaining My Environment	2	1
Evaluate the health and environmental consequences of air and water pollution	Managing the Environment/ Environmental Threats	1 & 2	1
Organize activities to increase awareness about environmental threats to coral reefs	Managing the Environment/ Health and Wealth	3	1

**GRADE 9**

Grade 9—HFLE		
Themes	Number of Objectives	Number of “major” objectives
Self and Interpersonal Relationships	38	5
Safety and Security	44	4
Sexuality and Sexual Health	48	9
Appropriate Eating & Fitness	30	4
Managing the Environment	29	4
<b>TOTAL</b>	<b>189</b>	<b>26</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

HEALTH AND FAMILY LIFE EDUCATION – GRADE 9			
Major Objectives	Themes/Modules	Terms	Units
Embrace the need to have positive self-concept to improve personal growth and development	Self and Interpersonal Relationships- Understanding Self	1	1
Show a willingness to communicate effectively, with respect and tolerance	Self and Interpersonal Relationships- Understanding Self	1	2
Modify negative reactions to positive in dealing with stressors	Self and Interpersonal Relationships- Coping with Risk and Adversity	1	1
Initiate appropriate helpful responses to prevent someone from committing suicide			
Exhibit awareness of personal responsibility in conflict situations	Self and Interpersonal Relationships- Coping with Risk and Adversity	1 or 2	2

HEALTH AND FAMILY LIFE EDUCATION – GRADE 9			
Major Objectives	Themes/Modules	Terms	Units
Justify the importance for teenagers to avoid underage drinking	Self and Interpersonal Relationships- Coping with Risk and Adversity	2 or 3	3
Acknowledge their risks and vulnerabilities to various unsafe practices	Safety and Security- Exploring Concepts of Protection, Safety and Security	1 or 2	1
Promote healthy behaviours that will mitigate dangers in their school environment	Safety and Security- Exploring Concepts of Protection, Safety and Security	2	2
Reflect on behaviours that may compromise safety and security	Safety and Security- Factors Influencing Behaviours Related to Safety and Security	2	1
Exhibit awareness of personal responsibility in ensuring their	Safety and Security-	3	1

HEALTH AND FAMILY LIFE EDUCATION – GRADE 9			
Major Objectives	Themes/Modules	Terms	Units
protection from online predators	Safeguards for Protection, Safety and Security		
Justify the importance of discussing issues of sexuality with parents, guardians, peers or a responsible adult	Sexuality and Sexual Health- Differentiating Between Sex and Sexuality	1	1
Critically reflect on their readiness for dating and its effects on personal goals		2	1
Advocate for an end to gender-based violence on the internet	Sexuality and Sexual Health- Sociocultural Influences on Sexual Behaviour	2	1
Justify the importance of accessing accurate		2	1

HEALTH AND FAMILY LIFE EDUCATION – GRADE 9			
Major Objectives	Themes/Modules	Terms	Units
information regarding sex and contraceptives	Sexuality and Sexual Health-  Managing Reproductive Health		
Reflect on their readiness to enter intimate relationships		2	1
Reflect on their readiness to become a parent when faced with situations that may lead to pregnancy			
Express views that reject or oppose risky sexual behaviours that will hinder personal goals	Sexuality and Sexual Health- Sexually Transmitted Infections	2	2
Show support for persons living with HIV/ AIDS	Sexuality and Sexual Health-	1	2



HEALTH AND FAMILY LIFE EDUCATION – GRADE 9			
Major Objectives	Themes/Modules	Terms	Units
	Sexually Transmitted Infections		
Explain the importance of being aware of laws related to adolescent sexual health to ensure safety, protection and accessibility to health services	Sexuality and Sexual Health- Access Sources of Health Information and Services	2	1
Practise cultivating a healthy lifestyle by having balanced meals	Appropriate Eating & Fitness- Making Healthy Choices	3	1
Consistently practise safety food measures to ensure food is safe to eat	Appropriate Eating & Fitness- Making Healthy Choices	3	2
Propose to their school community inexpensive ways to combat	Appropriate Eating & Fitness-	3	1

HEALTH AND FAMILY LIFE EDUCATION – GRADE 9			
Major Objectives	Themes/Modules	Terms	Units
barriers to physical activity	Good Health and Quality Living		
Initiate healthy food choices based on factual health-related information	Appropriate Eating & Fitness- Sourcing Information	3	1
Justify the importance of preserving the environment for future generations	Managing the Environment- Maintaining a Healthy Environment	1 or 3	1
Encourage actions and practices that will hinder the impact of pollution on the environment	Managing the Environment- Environmental Threats	3	1
Exhibit awareness of personal responsibility in indulging in proper waste management to ensure protection of the environment	Managing the Environment- Health and Wealth	1, 2 or 3	1

HEALTH AND FAMILY LIFE EDUCATION – GRADE 9			
Major Objectives	Themes/Modules	Terms	Units
Endorse health promoting behaviours that will reduce the threat mosquito borne diseases and illnesses	Managing the Environment-  Reducing Environmental Health Threats	1	1

# INFORMATION TECHNOLOGY

## GRADE 9

<i>Information Technology</i>		
<i>Strands/Themes</i>	<i>Number of Objectives</i>	<i>Number of “major” objectives</i>
Computer Components and Operations	34	31
Digital citizenship	19	10
Computational Thinking & Practice	11	11
<b>Total</b>	<b>64</b>	<b>52</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

INFORMATION TECHNOLOGY – GRADE 9			
Major Objectives	Strands	Terms	Units
<ol style="list-style-type: none"> <li>1. Define the terms 'file' and 'file management'</li> <li>2. Categorize files based on their file extensions</li> <li>3. Solve the path to a file, with the tree directory structure</li> <li>4. Perform file management related tasks in a directory folder</li> <li>5. Discuss the role of drivers in device management</li> <li>6. Explain and justify the need for database management systems</li> <li>7. Compare electronic databases and manual databases</li> <li>8. Design and populate a database table</li> <li>9. Create simple queries and reports from single tables</li> <li>10. Apply the concepts of importing and exporting database objects to a word processor or spreadsheet</li> <li>11. Perform mail merge using a spreadsheet or database table as the source</li> </ol>	Foundations of Hardware & Software	1	2
<ol style="list-style-type: none"> <li>12. Identify at least five communication devices used with computer networks today's society</li> <li>13. Describe correctly at least three communication software that are used in computer networks</li> <li>14. Compare at least four uses of communication technologies in different types of computer networks</li> </ol>		2	3

INFORMATION TECHNOLOGY – GRADE 9			
Major Objectives	Strands	Terms	Units
<p>15. Propose a modification to an existing computer network, for future expansion</p> <p>16. Describe the purpose of each component within a web address</p> <p>17. Explain how a web browser retrieves a desired web page</p> <p>18. Identify some characteristics of at least five distinct types of web sites</p> <p>19. Justify the use of two or more Internet services in an organization's department</p> <p>20. Describe accurately at least six threats to a computer network</p> <p>21. Identify correctly whether a computer network threat has compromised the availability, integrity, or confidentiality of a company's resources and services</p> <p>22. Determine appropriately which security measure(s) is applicable for a given situation</p>			
<p>23. Define terms related to website design</p> <p>24. Analyze website to determine domain names</p> <p>25. Examine steps to be followed when creating webpages</p> <p>26. Understand the website development process</p> <p>27. Create a storyboard for a webpage</p> <p>28. Design a website using HTML syntax and tags</p> <p>29. Identify various web authoring tools</p> <p>30. Create a website using online or offline web authoring Software</p>		3	6

INFORMATION TECHNOLOGY – GRADE 9			
Major Objectives	Strands	Terms	Units
<p>31. Analyze the design characteristics that makes a good website design</p> <p>32. Collaborate in group activities</p>			
<p>33. Define terms related to unethical behaviours such as ‘trolling’, ‘cyber bullying’ “cyber stalking”, and software piracy</p> <p>34. Describe the possible results of unethical practices using online resources</p> <p>35. Appropriately present information sourced from offline (such as CDs) and online (such as text, graphics, video, audio among others) resources</p> <p>36. Restate a search text/phrase, for an efficient search on the Internet</p> <p>37. Construct accurately a search text with two or more operators to refine the search result</p> <p>38. Specify correctly two or more search criterions for narrowing a search result</p>	<b>Digital Citizenship</b>	2	4
<p>39. Identify accurately at least four IT skills needed for a non- IT Specialist</p> <p>40. Describe accurately at least three job functions for new and emerging careers in Computer Science and Information Technology</p> <p>41. Identify relevant professionals who are needed for completing computing related projects in society</p>		2	5

INFORMATION TECHNOLOGY – GRADE 9			
Major Objectives	Strands	Terms	Units
42. Design a resume for a profession in the field of Information Technology/Computer Science			
43. Discuss the relationship between algorithms and programming languages 44. Decompose problems into input, processing and output 45. Represent algorithms using flowchart and pseudocode 46. Explain the concepts variable and constant as they relate to algorithm development 47. Identify factors to consider when choosing an appropriate variable name 48. Describe and select appropriate data types based on problems 49. Describe sequencing, selection and iteration control structures 50. Distinguish among the different generations of programming languages 51. Explain the importance of good programming styles 52. Develop simple programmes to solve specific problems 53. Collaborate in group activities	Computational Thinking and Practice	3	7



# GEOGRAPHY

## GRADE 7

<i>Grade 7—Geography</i>		
<b>Strands/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
The Human Habitat: Processes and Change	111	51
Spatial Thinking and Analysis: Maps, Photographs and Statistical Diagrams	18	13
Environmental Awareness, Change and Sustainability	16	6
Geographical Investigations, Methods and Project Design	11	6
<b>Total</b>	<b>156</b>	<b>76</b>

*N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.*

GEOGRAPHY – GRADE 7			
Major Objectives	Themes	Terms	Units
1. Formulate definitions for the concept Geography	The Human Habitat: Processes and Change	1	1
2. Identify and classify sub-branches of Geography as physical or human			
3. Explain and apply the five themes of Geography to the surrounding environment			
4. Interpret geographical information from photographs			
5. Create tables from geographical information			
6. Formulate definitions for the terms Universe, Galaxy, Solar System, Planet, Outer Space, Dwarf Planet, Star, Meteor, Meteoroid, Meteorite, Moon, Asteroid, Comet	The Human Habitat: Processes and Change	1	2
7. Describe the characteristics of Earth which makes the planet habitable			
8. Identify and classify planets according to composition and size			
9. Define the terms population, migration and settlement	The Human Habitat: Processes and Change	1	4
10. Using a dot map, describe Jamaica's population distribution			
11. Given population data, create a simple dot map			

GEOGRAPHY – GRADE 7			
Major Objectives	Themes	Terms	Units
12. Outline how major physical landform features influence population distribution in Jamaica			
13. Draw simple bar graphs to show Jamaica's population by parish			
14. Compare urban settlements to rural settlements in Jamaica			
15. Identify the two main categories of migration			
16. Citing evidence, from given scenarios, explain why people move from one place to another in Jamaica			
17. Identify the effects of migration on rural and urban settlements in Jamaica			
18. Construct flow charts/flow maps to show the migration of people			
19. Formulate a definition for the term weather	The Human Habitat: Processes and Change	2	1
20. Describe the characteristics of each element of weather			
21. Identify the various units of measurement for each element of weather			
22. Read weather instruments to gather information about the elements of weather			

GEOGRAPHY – GRADE 7			
Major Objectives	Themes	Terms	Units
23. Use weather symbols to create simple weather maps/synoptic charts			
24. Outline the main components of the Hydrological/Water Cycle			
25. Define key terms: precipitation, condensation, surface run-off, evaporation, transpiration, infiltration, groundwater, aquifers, river			
26. Describe the stages of the Hydrological/Water cycle			
27. Create flow charts to establish the relationships among the components of the Hydrological/Water Cycle in different environments			
28. Identify the processes in the Hydrological/Water Cycle that give rise to rivers			
29. Formulate definitions for the terms rock and soil	The Human Habitat: Processes and Change	2	3
30. Examine rock and soil samples to determine their characteristics			
31. Classify rocks as igneous, metamorphic or sedimentary			
32. Classify soils by grain size			
33. Differentiate between intrusive and extrusive volcanic rocks			

GEOGRAPHY – GRADE 7			
Major Objectives	Themes	Terms	Units
34. Show the relationship among the three rock types			
35. Give at least three examples of each rock type			
36. Define the terms erosion and weathering			
37. Determine how erosion and weathering of rocks and soils occur in various environments			
38. Formulate a definition for the term resource	The Human Habitat: Processes and Change	3	1
39. Classify resources found in Jamaica as human or natural			
40. Categorise natural resources as renewable or non-renewable			
41. Formulate a definition for the concept economic activity			
42. Categorise economic activity as primary, secondary and tertiary			
43. Formulate a definition for the term agriculture	The Human Habitat: Processes and Change	3	2
44. Differentiate among commercial arable farming, peasant farming, mixed farming, mixed cropping, market gardening, commercial pastoral farming			

GEOGRAPHY – GRADE 7			
Major Objectives	Themes	Terms	Units
45. Suggest reasons why particular types of crops are planted in the major agricultural areas in Jamaica			
46. Make a list of activities practised by farmers that may encourage the removal of trees in Jamaica.			
47. Formulate a definition for the term deforestation			
48. Formulate a simple definition for the term sustainable			
49. Compare two farms which plant the same crop, but use different techniques, to determine which is more sustainable			
50. Distinguish among different types of maps	Spatial Thinking and Analysis: Maps, Photographs and Statistical Diagrams	1	3
51. Identify the types of photographs			
52. Distinguish among ground level and aerial photographs and satellite imagery			
53. Create a list of the essential features of a map			
54. Associate colours and symbols on maps with landscape features			
55. Draw and interpret simple contour patterns of landforms			

GEOGRAPHY – GRADE 7			
Major Objectives	Themes	Terms	Units
56. Explain the uses of the essential features of maps			
57. Interpret simple ground level and aerial photographs, satellite imageries and maps			
58. Draw simple sketch maps and plans			
59. Use four-point Compass Rose to state relative location			
60. Use Cardinal Points and protractors to establish direction and angular bearing between two locations			
61. Use map scales to measure straight line distances between two points			
62. Locate places using map Coordinate Systems			
63. Differentiate between normal atmospheric events and “extreme” weather events.	Environmental Awareness, Change and Sustainability	2	2
64. Differentiate between a flood/storm/hurricane ‘watch’ and ‘warning’			
65. Propose plans to prepare adequately for droughts, floods, storms and hurricanes			
66. Plot the track of a tropical atmospheric system			

GEOGRAPHY – GRADE 7			
Major Objectives	Themes	Terms	Units
67. Categorise activities undertaken by individuals or agencies for selected hazardous events into the following groups: Before the Event, During the Event, and After the Event			
68. Formulate a definition for the terms 'food security' and 'food safety'	Environmental Awareness, Change and Sustainability	3	3
69. Construct pie charts to show the country of origin of major food items consumed in Jamaica and use the pie charts to discuss implications for Jamaica's food security and safety			
70. Simply explain the concepts 'climate change' and 'global warming'			
71. Outline the steps in carrying out fieldwork	Geographical Investigations, Methods and Project Design	2	4
72. Use simple fieldwork techniques to gather and record data on a selected problem			
73. Identify the types of secondary information that would be obtained from maps, textual sources and online sources to support the primary data collected			
74. Present information gathered in written project format.			



GEOGRAPHY – GRADE 7			
Major Objectives	Themes	Terms	Units
75. Draw conclusions about a study area/problem	Geographical Investigations, Methods and Project Design		
76. Create a simple bibliography using a given template			

# GRADE 8

<i>Grade 8—Geography</i>		
<b>Strands/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
The Human Habitat: Processes and Change	79	46
Spatial Thinking and Analysis: Maps, Photographs and Statistical Diagrams	15	10
Environmental Awareness, Change and Sustainability	42	24
Geographical Investigations, Methods and Project Design	9	8
<b>Total</b>	<b>145</b>	<b>88</b>

***N.B.** Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.*

GEOGRAPHY – GRADE 8			
Major Objectives	Themes	Terms	Units
1. Describe the effects of rotation and revolution on the Earth	The Human Habitat: Processes and Change	1	2
2. Identify the Equator and Prime Meridian			
3. Calculate changes in time using lines of longitude			
4. Explain the effect of the tilt of the Earth on the length of daylight hours			
5. Connect the Earth's tilt and revolution to seasonal changes in atmospheric temperature			
6. Differentiate between a solar eclipse and a lunar eclipse			
7. Compare population size of Caribbean Countries	The Human Habitat: Processes and Change	1	3
8. Explain, using maps, the general distribution of population in Caribbean countries			
9. Outline reasons for the pattern of population distribution across the Caribbean			
10. Recall the definitions of the terms 'population', 'migration', 'emigration', 'immigration', 'migrants', 'internal migration', 'external migration', 'settlement'			
11. Extract information from Flow maps			

GEOGRAPHY – GRADE 8			
Major Objectives	Themes	Terms	Units
12. Investigate the various push and pull factors which cause people to migrate within the Caribbean			
13. Assess the effects of migration within the Caribbean on both the country of origin and the destination			
14. Identify patterns of settlement which form in the Caribbean			
15. Cite evidence obtained from maps and photographs to explain reasons for the formation of each settlement pattern			
16. Identify settlement patterns on maps			
17. Use maps to identify the main activities within major settlements in Caribbean countries.			
18. Differentiate between weather and climate	The Human Habitat: Processes and Change	2	1
19. Use data obtained from a weather station to plot a line graph to show variation in temperature			
20. Use data obtained from a weather station to draw a bar graph to show rainfall amounts			
21. Interpret various climographs from Caribbean countries			
22. Define the terms 'precipitation', 'rain', 'hail', 'snow', 'sleet'			

GEOGRAPHY – GRADE 8			
Major Objectives	Themes	Terms	Units
23. Differentiate between the following: dew and mist; fog and cloud			
24. Investigate the conditions necessary for clouds to form			
25. Differentiate between the following types of rainfall: Convectional; Relief/Orographic; Frontal/Cyclonic			
26. Use thematic maps to describe the variations in weather patterns in Jamaica			
27. Calculate the following: range of temperature; average (mean) temperatures			
28. Describe the characteristics of vegetation of the Tropical Marine Climate and explain why these vegetation types are important	The Human Habitat: Processes and Change	2	3
29. Formulate definitions of the terms 'weathering' and 'erosion'			
30. Describe the main characteristics of limestone rocks			
31. Investigate how limestone rocks are formed			
32. Link the formation of surface and underground features to the characteristics of limestone rocks			
33. Identify limestone features on Geological Maps			

GEOGRAPHY – GRADE 8			
Major Objectives	Themes	Terms	Units
34. Describe surface and underground limestone features			
35. Define the concept value added	The Human Habitat: Processes and Change	3	1
36. Define the term 'secondary economic activity'			
37. Identify the types of secondary economic activities in Jamaica			
38. Outline the types of resources used in secondary economic activities			
39. Establish the relationships between primary and secondary economic activities			
40. Formulate a definition for the concept agro-processing	The Human Habitat: Processes and Change	3	2
41. Outline the various types of agro-processing			
42. Discuss the importance of agro-processing			
43. Develop logical arguments to explain the location of agro-processing plants			
44. Differentiate between food preservation and processing			
45. Explain the importance of food processing			
46. Conduct a case study of an agro-processing plant in Jamaica			

GEOGRAPHY – GRADE 8			
Major Objectives	Themes	Terms	Units
47. Use Cardinal and Primary Inter-Cardinal points to find direction on a map from one place to another	Spatial Thinking and Analysis: Maps, Photographs and Statistical Diagrams	1	1
48. Use a protractor to calculate angular bearing on a map from one point to another			
49. Use the linear scale to measure straight line and simple curved distances between two places			
50. Express the scale of a map as a ratio or a statement			
51. Identify Eastings and Northings on maps			
52. Find location using four figure grid references			
53. Reproduce map sections from a base map			
54. Identify simple landform features from contours			
55. Associate the landforms shown on maps to features shown in photographs			
56. Draw and annotate simple cross-sections from contour lines			
57. Formulate a definition for the terms 'pollution', 'pollutant', 'greenhouse gas', 'greenhouse effect', 'global warming', 'disease', 'vector', 'communicable disease', 'green technology'	Environmental Awareness, Change and Sustainability	1	4

GEOGRAPHY – GRADE 8			
Major Objectives	Themes	Terms	Units
58. Categorise pollution as air, water or land pollution			
59. Discuss the effects of different types of pollution on the environment			
60. Associate global travel trends with the spread of diseases and increasing pollution			
61. Investigate and suggest ways of reducing pollution			
62. Assess maps showing the spread of diseases			
63. Investigate how green technology may be used to reduce pollution in Jamaica			
64. Identify major rivers in Jamaica	Environmental Awareness, Change and Sustainability	2	2
65. Link aquifers and groundwater to the presence of rivers and wells			
66. Define the terms 'conservation' and 'sustainable'			
67. Outline the importance of rivers and wells			
68. Explain the impact of drought conditions on the physical nature of rivers and wells			
69. Recognise the impact of drought on the local community			
70. Determine ways in which water may be conserved at home and school			



GEOGRAPHY – GRADE 8			
Major Objectives	Themes	Terms	Units
71. Simply explain how the Earth's atmosphere is heated	Environmental Awareness, Change and Sustainability	3	3
72. Outline the concept of climate change			
73. Define the terms 'greenhouse gas', 'greenhouse effect', 'carbon credit', 'carbon footprint'			
74. Identify indicators of a warming world and determine which indicators apply to Jamaica			
75. Outline the various activities in Jamaica which may contribute to climate change			
76. Assess the benefits and challenges of preserving and using forest resources			
77. Propose possible changes to weather elements and weather systems in the Caribbean due to increases in greenhouse gases in the atmosphere			
78. Suggest how changes in climate will affect the natural and human environments in Jamaica			
79. Discuss the impact that human induced climate change will have on the coastal resources in Jamaica			
80. Propose ways in which the negative effects of climate change may be reduced or prevented.			

GEOGRAPHY – GRADE 8			
Major Objectives	Themes	Terms	Units
81. Generate a series of steps to study a selected problem/topic	Geographical Investigations, Methods and Project Design	2	4
82. Design a simple data collection instrument			
83. Use an appropriate method to determine sample size or area			
84. Recall the definitions of the terms 'population' and 'sample size'			
85. Collect and record data using appropriate methodologies			
86. Summarise data using appropriate statistical diagrams			
87. Analyse data collected using appropriate methodologies			
88. Produce a report of findings			

**GRADE 9**

<i>Grade 9—Geography</i>		
<b>Strands/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
The Human Habitat: Processes and Change	97	56
Spatial Thinking and Analysis: Maps, Photographs and Statistical Diagrams	19	17
Environmental Awareness, Change and Sustainability	36	21
Geographical Investigations, Methods and Project Design	10	6
<b>Total</b>	<b>162</b>	<b>100</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

GEOGRAPHY – GRADE 9			
Major Objectives	Themes	Terms	Units
1. Calculate population change for selected Caribbean countries	The Human Habitat: Processes and Change	1	3
2. Formulate definitions for international migration, migrant, immigration, immigrant, emigration, emigrant, population growth/decline			
3. Outline reasons Jamaicans migrate internationally and evaluate reasons for the selection of destinations			
4. Create and explain a Flow map showing movement of people internationally from Jamaica			
5. Use Jamaica as a case study, to evaluate the impact of international migration on the source and destination countries			
6. Develop and present a comprehensive strategy to prevent human trafficking, protect victims of trafficking and prosecute offenders.			
7. Explain how settlement patterns and distribution are affected by human and natural factors			
8. Assess how settlements may change over time due to migration			
9. Visually outline the various geographical skills used in selected professions		1	4

GEOGRAPHY – GRADE 9			
Major Objectives	Themes	Terms	Units
10. Define the concept biome	The Human Habitat: Processes and Change	2	1
11. Annotate large biomes on a blank map of the world			
12. Locate the Tropics on a World Map			
13. Outline the main characteristics of the tropical rainforest and savannah			
14. Assess the relationship between climate (temperature, rainfall and amount of sunshine) and the structure of the vegetation of the rainforest and savannah.			
15. Investigate the structure and location of the following types of Caribbean vegetation: coastal vegetation; grasslands/savannah; rainforest			
16. Investigate the structure and location of the following types of Caribbean vegetation: coastal vegetation; grasslands/savannahs; rainforest.			
17. Outline how vegetation changes due to changes in temperature and rainfall amounts in Jamaica			
18. Investigate how areas of rainforests and savannahs are valuable to humans.			
19. Label the internal and external structure of the Earth	The Human Habitat: Processes and Change	2	2
20. Define the concept “Plate Tectonics”			

GEOGRAPHY – GRADE 9			
Major Objectives	Themes	Terms	Units
21. Describe the characteristics of the core, mantle and crust.			
22. Label major continental and oceanic plates			
23. Differentiate between oceanic crust and continental crust			
24. Identify and describe the Caribbean plate and the adjacent plates and explain their movement in relation to each other			
25. Design an earthquake plan for your home, community and school			
26. Outline ways earthquakes are recorded and measured			
27. Classify earthquakes according to depth and origin			
28. Describe the types of plate boundaries			
29. Explain the processes occurring at each plate boundary			
30. Account for the occurrence of earthquakes, volcanoes, island arcs, fold mountains, mid-oceanic ridges, rift valleys, lava plateaux, accretionary prisms/wedges, subduction zones and faults at plate boundaries	The Human Habitat: Processes and Change	2	2
31. Connect the occurrence of major earthquakes, volcanoes and fold mountains to plate margins			

GEOGRAPHY – GRADE 9			
Major Objectives	Themes	Terms	Units
32. Compare the structures of shield cones, composite cones, ash and lava cones and dome cones and determine reasons for the variations			
33. Classify volcanic landforms as intrusive or extrusive			
34. Show how intrusive and extrusive features form			
35. Distinguish among natural events, natural hazards and disasters			
36. Using the theory of plate tectonics, explain the occurrence of earthquakes in Caribbean countries			
37. Conduct an Earth System Science Analysis to determine the effects of a major earthquake and volcanic eruption on a selected Caribbean country			
38. Recall the definition of the terms resource and economic activity	The Human Habitat: Processes and Change	3	1
39. Define the terms tertiary economic activity and economic linkage			
40. Identify the resources which are used in tertiary economic activities			
41. Classify the activities carried out in a selected industry as primary, secondary or tertiary			

GEOGRAPHY – GRADE 9			
Major Objectives	Themes	Terms	Units
42. Compare the contributions of various tertiary economic activities to the local economy			
43. Outline the various aspects of the tourism industry in Jamaica			
44. Outline the concept tourism	The Human Habitat: Processes and Change	3	2
45. Identify, on a map, the major tourist resort areas in Jamaica			
46. Describe the types of resources located in each resort area to support the tourism product			
47. Outline the characteristics of the types of tourism in Jamaica			
48. Justify the fluctuations in arrivals of tourists over the period of a year			
49. Analyse the importance of various sectors to the tourism industry			
50. Formulate a definition for the concept community-based tourism			
51. Describe the coral reef biome			
52. Describe the types of coral reefs which grow along Jamaica's coastline			
53. Suggest ways in which the presence of reefs along Jamaica's coastline contribute to the development of tourism in Jamaica.			



GEOGRAPHY – GRADE 9			
Major Objectives	Themes	Terms	Units
54. Research conditions which favour coral reef growth			
55. Explain how coral bleaching occurs			
56. Assess the threats to coral reefs in the Caribbean and propose one solution to mitigate each threat identified.			
57. Construct and use a sixteen-point Compass Rose	Spatial Thinking and Analysis: Maps, Photographs and Statistical Diagrams	1	2
58. Use a protractor to measure angular bearing from one point to another			
59. State the absolute location of places using four and six figure grid references			
60. Identify the ways in which a map scale may be represented and convert the scale from one form to another			
61. Measure curved and straight-line distances between points on maps			
62. Calculate distances using map scales			
63. Enlarge and reduce map sections to scale			
64. Calculate the new scale for enlarged or reduced sections of maps			
65. Identify and differentiate between small- and large-scale maps			
66. Identify and differentiate between small scale and large-scale maps			

GEOGRAPHY – GRADE 9			
Major Objectives	Themes	Terms	Units
67. Identify, describe and annotate types of landforms represented by contour patterns on maps			
68. Describe in simple terms the types of slopes that are represented by contour patterns on maps			
69. Calculate the gradient of slopes along straight lines and curved paths.			
70. Construct and annotate cross-sections and determine Intervisibility between points on each cross section			
71. Use the legend/key to identify the human activities that are undertaken in a given area			
72. Suggest reasons for the distribution of specific natural features and human activities over an area represented on a map or photograph			
73. Use global coordinates to find location			
74. Identify the components of the Earth's System	Environmental Awareness, Change and Sustainability	1	1
75. Formulate definitions for lithosphere, hydrosphere, biosphere, atmosphere, system, open system, closed system			

GEOGRAPHY – GRADE 9			
Major Objectives	Themes	Terms	Units
76. Describe the characteristics of each of the Earth's spheres and explain the importance of each			
77. Given specific scenarios, explain the interactions between a natural or human induced event and each of the four components of the Earth's System			
78. Given specific natural or human induced events, explain the cause and effect relationships which exists among the four components of the Earth			
79. Identify the components of Green Technology and explain how Green Technology may be used to care for the Earth			
80. Differentiate between a depression, tropical storm and hurricane	Environmental Awareness, Change and Sustainability	3	3
81. Differentiate between a 'warning' and a 'watch' as it relates to the occurrence of natural events			
82. Recall the difference among natural event, natural hazard and disaster			
83. Describe and categorise depressions, tropical storms and hurricanes based on wind speed			

GEOGRAPHY – GRADE 9			
Major Objectives	Themes	Terms	Units
84. Describe and categorise hurricanes based on the Saffir-Simpson scale of hurricane intensity	Environmental Awareness, Change and Sustainability	3	3
85. Explain the development of hurricanes in the western hemisphere			
86. Plot the track of depressions, tropical storms and hurricanes on a map using global coordinates (latitude and longitude) and appropriate weather symbols			
87. Read synoptic charts/weather maps			
88. Annotate a simple cross-section to show the vertical structure of a hurricane			
89. Create a plan for the home/school/community to deal with the impact of a tropical storm/hurricane			
90. Explore the convention used to name tropical storms/hurricanes			
91. Identify the main factors influencing the formation of hurricanes			
92. Explain why tropical storms/hurricanes are most likely to occur during a particular period of the year			
93. Describe the changes in weather patterns associated with the passage of a Cold Front across the Caribbean			

GEOGRAPHY – GRADE 9			
Major Objectives	Themes	Terms	Units
94. Explain and apply the Emergency Management Cycle to a common hazard in the Caribbean			
95. Recall the steps in preparing for fieldwork	Geographical Investigations, Methods and Project Design	2	3
96. Design suitable data collection instruments			
97. Use fieldwork techniques to collect data to answer a given question or solve a problem			
98. Compile data collected and summarise using statistical diagrams			
99. Use data to support hypothesis or research question			
100. Prepare a written report to present findings			

# HISTORY

## GRADE 7

<i>Grade 7—Caribbean History</i>		
Strands/Themes	Number of Objectives	Number of “major” objectives
Discovering the nature, elements, and importance of History through Historical research	26	17
Continuity and Change	8	4
Encounters, Conflicts and Revolutions	43	21
The Interconnectivity between Humankind and the Past	27	12
<b>Total</b>	<b>104</b>	<b>54</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

HISTORY – GRADE 7			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Define and use correctly the concepts/terms:                             <ul style="list-style-type: none"> <li>History, time, sequence, chronology, material remains, relics/artefacts, primary sources, secondary sources, oral sources, change, continuity, historical significance</li> </ul> </li> <li>Identify the characteristics of History (people, facts, time, change, causes, effects, events)</li> <li>Discuss the relevance or importance of history to everyday life</li> <li>Recognise the value of History in helping to shape their future</li> <li>Recognize the importance of various data gathering techniques used by historians</li> </ul>	Discovering the nature, elements, and importance of History through research	1	1

HISTORY – GRADE 7			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Define and use correctly the concepts/terms:                             <ul style="list-style-type: none"> <li>excavate, archaeology, fact, fiction, anthropology, fossils, petroglyphs, reconstruct, investigate, opinion, historical evidence, verify, subjective, selective, significant, historical sources, artefacts, museum, archives, legend, ancient, oral tradition, historical interpretation</li> </ul> </li> <li>Describe how historians gather information</li> <li>Identify primary, secondary and oral sources</li> <li>Show appreciation for the work of historians</li> </ul>	Discovering the Nature, Elements and Importance of History through Research	1	2
<ul style="list-style-type: none"> <li>Define and use correctly the concepts/terms:                             <ul style="list-style-type: none"> <li>change, sequence, continuity, architecture, era, decade, century,</li> </ul> </li> </ul>	Continuity and Change	1	3



HISTORY – GRADE 7			
Major Objectives	Strands	Terms	Units
<p>dynasty, generation, fashion, transportation, lifestyle.</p> <ul style="list-style-type: none"> <li>Identify areas of change and continuity in the Jamaican society from the 18th century to the present</li> <li>Illustrate the changes (in transportation, communication, fashion recreational activities, architecture among others) which have taken place in Jamaica over the last century</li> <li>Recognize that continuity and change is a part of everyday life</li> </ul>			
<ul style="list-style-type: none"> <li>Define and use correctly the concepts/terms:                             <ul style="list-style-type: none"> <li>research, project, aims/objectives, interview, survey, questionnaires, method, data, data collection census</li> </ul> </li> <li>Identify an area of research i.e. family, school, or community</li> </ul>	Discovering the Nature, Elements and Importance of History through Historical Research	1	4

HISTORY – GRADE 7			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Compile research and present findings in project form</li> <li>Develop confidence in their ability to complete research tasks independently <i>NB. Research should include statistical data example: date when their church was founded, membership at the time, name(s) of founder(s)</i></li> </ul>			
<ul style="list-style-type: none"> <li>Examine the factors influencing the migration and settlement of the Tainos and the Kalinagos</li> <li>Discuss the survival strategies, (farming, fishing, hunting, trading) used by the Tainos the and Kalinagos</li> <li>Compare the social, religious and political life of the Tainos and the Kalinagos with contemporary society</li> <li>Appreciate the Tainos' and Kalinagos' ability to manipulate the natural environment in journeying across the Caribbean from South</li> </ul>	Encounters Conflicts and Revolutions	2	1

HISTORY – GRADE 7			
Major Objectives	Strands	Terms	Units
<p>America, surviving natural disasters: hurricanes, floods etc.</p> <ul style="list-style-type: none"> <li>Discuss the main reasons for the introduction of the Encomienda System</li> <li>Describe the treatment that the indigenous people received under The Encomienda System and the effects it had on them</li> <li>Evaluate the responses of the indigenous people to the treatment they received under the Encomienda System</li> </ul>			
<ul style="list-style-type: none"> <li>Define and use correctly the concepts/terms:                             <ul style="list-style-type: none"> <li>indentureship, indentured servants, contract, forced labour, resistance, arbitrary, petition, volunteers, planters, colony, settlement, and proprietor</li> </ul> </li> <li>Discuss the reasons for the introduction of European</li> </ul>	Encounters, Conflicts and Revolutions	2	2

HISTORY – GRADE 7			
Major Objectives	Strands	Terms	Units
<p>Indentureship in the Caribbean in the 17th century</p> <ul style="list-style-type: none"> <li>Examine the terms of the labour contracts that were designed for the indentured servants differentiating between employer and indentured servants</li> <li>Describe how the indentured servants were treated by the Europeans during the period of Indentureship and their response to the treatment</li> </ul>			
<ul style="list-style-type: none"> <li>Define and use correctly the concepts/terms:                             <ul style="list-style-type: none"> <li>Sugar Revolution, slave trade, enslavement, enslaved Africans, Middle Passage, Trans- Atlantic trade, chattel slavery, slaver, production, exploitation, resistance, settlers, colonists, ethnic groups, superior, inferior, plantation</li> </ul> </li> </ul>	Encounters, Conflicts and Revolutions	2	3

HISTORY – GRADE 7			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Discuss the reasons why Africans were brought to the Caribbean</li> <li>Describe the conditions on the Middle Passage during the Trans-Atlantic trade</li> <li>Identify the social groups on a sugar plantation and state how they related to each other</li> <li>Examine the treatment of enslaved Africans on the sugar plantation and their response to the treatment</li> </ul>			
<ul style="list-style-type: none"> <li>Define and use correctly the concepts/terms:                             <ul style="list-style-type: none"> <li>freedom, resistance, violent, non-violent, rebellion, revolt, revolution, punishment, institution, marronage, heritage, control, restriction, slave laws</li> </ul> </li> <li>Outline the various forms of resistance</li> </ul>	Encounters, Conflict and Revolutions	2	4

HISTORY – GRADE 7			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Evaluate the success/failure of each resistance effort</li> <li>Develop an appreciation for the effects of the resistance efforts in the shaping of Jamaica's history</li> <li>Define and Identify on a map of Jamaica:                             <ul style="list-style-type: none"> <li>Maroons communities</li> <li>Parishes in which Tacky and Sam Sharpe rebellions occurred</li> </ul> </li> </ul>			
<ul style="list-style-type: none"> <li>Use correctly the concepts/terms:                             <ul style="list-style-type: none"> <li>abolition, abolitionist, emancipation, freedom, amelioration, humanitarian, enslavement, West India Interest</li> </ul> </li> <li>Identify the British Abolitionists</li> <li>Discuss the actions taken by the enslaved which helped to bring an end to slavery</li> </ul>	The Interconnectivity between Humankind and the Past	3	1

HISTORY – GRADE 7			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Analyse the reasons for the ending of slavery</li> </ul>			
<ul style="list-style-type: none"> <li>Define and use correctly the concepts/terms:                             <ul style="list-style-type: none"> <li>abolition, emancipation, apprenticeship, amelioration, Stipendiary Magistrates, West India Interest</li> </ul> </li> <li>Outline the provisions of the Emancipation Act of 1833</li> <li>Explain the difficulties encountered by the apprentices and planters during the Apprenticeship System</li> <li>Assess the reasons for the ending of the Apprenticeship System</li> </ul>	The Interconnectivity between Humankind and the Past	3	2
<ul style="list-style-type: none"> <li>Define and use correctly the concepts/terms:                             <ul style="list-style-type: none"> <li>peasant, peasantry, diversify, economy, non-conformist missionaries, planter class, government, cooperatives, free villages, subsistence farming</li> </ul> </li> </ul>	The Interconnectivity between Humankind and the Past	3	3

HISTORY – GRADE 7			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>State factors which contributed to the development of the peasantry in the British Caribbean 19th century</li> <li>Discuss the obstacles faced by the peasants in the 19th century</li> <li>Examine the initiatives of the peasants showing how these contributed to their social, political and economic advancement in the 19th century</li> </ul>			



# GRADE 8

<i>Grade 8—Caribbean History</i>		
Strands/Themes	Number of Objectives	Number of “major” objectives
Discovering the nature, elements, and importance of History through Historical research	-	-
Continuity and Change	79	42
Encounters, Conflicts and Revolutions	-	-
The Interconnectivity between Humankind and the Past	14	8
<b>Total</b>	<b>93</b>	<b>50</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

HISTORY – GRADE 8			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Define and use correctly the concepts/terms:                             <ul style="list-style-type: none"> <li>ancient, civilization, civilized, community, emergence, sedentary, nomadic, river valley, sedentary, communities, specialized occupations, delta, and organized government</li> </ul> </li> <li>Identify conditions that are necessary for civilizations to emerge or develop</li> <li>Assess the significance of rivers to the development of ancient civilization</li> <li>Identify the types of specialized occupations in early civilizations</li> <li>Compare the features of sedentary communities in early civilizations with contemporary Jamaican society</li> </ul>	Continuity and Change	1	1

HISTORY – GRADE 8			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Define and use correctly the concepts/terms:                             <ul style="list-style-type: none"> <li>ancient, irrigation, canals, shadoof, pharaoh, pyramids, hieroglyphics, hieratic, dynasties, mummification, papyrus, polytheism, nomadic, sedentary communities, civilization, conquest, kingdom</li> </ul> </li> <li>Identify inventions that brought about significant changes in ancient Egypt</li> <li>Discuss the importance of agriculture and trade in the ancient Egyptian society</li> <li>Show an appreciation for the achievements of ancient Egypt and their impact on the modern world</li> <li>Examine the social groups in the ancient Egyptian society and the duties performed by each group</li> <li>Discuss the roles of the Pharaoh in ancient Egypt</li> </ul>	Continuity and Change	1	2
<ul style="list-style-type: none"> <li>Define and use correctly the concepts/ terms:</li> </ul>	Continuity and Change	1	3

HISTORY – GRADE 8			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>○ ancient, cuneiform, ziggurats, Fertile Crescent, polytheism, sedentary communities, civilization, conquest, the epic of Gilgamesh, Sumeria, Sumerians, Middle East, dykes, specialized occupations, stylus, clay tablets</li> <li>• Identify the inventions that brought about significant changes in Mesopotamia</li> <li>• Describe the religion, government and law codes of the Mesopotamians</li> <li>• Appreciate the contributions of Mesopotamians to today's society</li> </ul>			
<ul style="list-style-type: none"> <li>• Define and use correctly the concepts:                             <ul style="list-style-type: none"> <li>○ ancient, Great Wall, Confucius, Hwang-Ho river (yellow river), wheelwrights, elaborate symbols, water buffalo, war-chariots, pit dwelling, Yang and Yin, divination, astronomers, dynasty, philosophies, Taoism, Confucianism, Far</li> </ul> </li> </ul>	Continuity and Change	1	4

HISTORY – GRADE 8			
Major Objectives	Strands	Terms	Units
<p>East, fortified castles, customs</p> <ul style="list-style-type: none"> <li>Describe the system of writing in early China</li> <li>Assess the significance of discoveries and inventions in ancient China that improved their way of life</li> <li>Appreciate the achievements of ancient China and their contribution to contemporary societies</li> </ul>			
<ul style="list-style-type: none"> <li>Define and use correctly the concepts:                             <ul style="list-style-type: none"> <li>ancient, Indus Valley, Indus River, floodwalls, granaries, artisan, terracotta, Aryan civilization, semi-nomadic, Vedas, Brahman, patriarchal, patrilineal, caste system, kshatriya, vaishya, shudra, Buddha, Buddhism, Buddhist, Hindu, epics, Gupta, empire, Mughal empire, Vedic Aryan civilization, Muslims</li> </ul> </li> <li>Describe the way of life of the people of the Indus Valley</li> </ul>	Continuity and Change	1	5

HISTORY – GRADE 8			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>• Explain the rise of the Vedic Aryan Civilization in ancient India</li> <li>• Demonstrate an appreciation for the contribution that ancient India has made to contemporary Jamaican society</li> </ul>			
<ul style="list-style-type: none"> <li>• Define and use correctly the concepts:               <ul style="list-style-type: none"> <li>○ Americas, conquest, empire, civilization, archaeology, division of labour, occupation, social organisation, polytheism, polytheistic, technology, Tenochtitlan, chinampas, Montezuma 11, human sacrifice, canal, causeway, plaza, milpa, relay, porters, bondage, pyramid, tribute, litters, ball court, gourd, cocoa, piazzas, land reclamation</li> </ul> </li> <li>• Explain the effects of the inventions for example their system of writing, calendar, chinampas on the Aztec society</li> <li>• Show an appreciation for the advanced level of development in the Aztec</li> </ul>	Continuity and Change	2	1

HISTORY – GRADE 8			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Define and use correctly the concepts/terms:                             <ul style="list-style-type: none"> <li>Americas, conquest, empire, civilization, archaeology, division of labour, occupation, social organisation, polytheism, polytheistic, technology, human sacrifice, plaza, palaces, pyramid, granaries (chultunes), Halach Uinic, cenotes, irrigation, indigenous, reservoirs, chac, sacrifices, tattoo, pok-a-tok, Central America, astronomy, droughts</li> </ul> </li> <li>Describe the social, political, religious and economic organizations of the Mayas</li> <li>Discuss the effects of the inventions on their development for example, their system of writing (glyphs), mathematics, astronomy and calendar</li> <li>Show an appreciation for the level of achievement in the Maya society</li> </ul>	Continuity and Change	2	2
<ul style="list-style-type: none"> <li>Define and use correctly the concepts:</li> </ul>	Continuity and Change	2	3

HISTORY – GRADE 8			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>○ llamas, quipus, aquifer, quipo, mita, llacs, Sapa Inca, Sinchi, diet, Inca, Waise, inkarri, Cusco</li> <li>• Describe the social, political, religious and economic organisations of the Incas</li> <li>• Show an appreciation for the level of achievement in the Inca's society</li> <li>• Assess the major achievements of the Incas in areas such as road engineering and recording keeping (despite the lack of writing)</li> </ul>			
<ul style="list-style-type: none"> <li>• Define and use correctly the concepts:               <ul style="list-style-type: none"> <li>○ feudal, serfs, vassals, craftsmen, nobility, barons, farmers, peasants, Middle/Medieval Age, guilds, kings, lords, nobles, knights, pope, serfdom, tenant farmers, castle, crusade, aqueduct, minstrel, barbarian, scholar, heretic, infidel, cardinal, cathedral, bishop, monks, nuns, priests, abbeys, monasteries, bourgeoisie, papacy</li> </ul> </li> </ul>	Continuity and Change	3	1



HISTORY – GRADE 8			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Identify the features/characteristics of Feudalism during the Middle Ages</li> <li>Discuss the role of the Roman Catholic Church in the Middle Ages</li> <li>Examine the social groups in Medieval Europe</li> </ul>			
<ul style="list-style-type: none"> <li>Define and use correctly the concepts:                             <ul style="list-style-type: none"> <li>Renaissance, exploration, inventions, compass, astrolabe, chart, quadrant, navigate, navigation, printing press, The East (Asia), Muslims, trade, commerce, voyages</li> </ul> </li> <li>Examine the several areas of life that were influenced by the Renaissance literature, art, architecture, religion, and the sciences</li> <li>Show appreciation for the achievements of the Renaissance and their impact on contemporary society</li> </ul>	Continuity and Change	3	2

HISTORY – GRADE 8			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Describe the inventions of the Renaissance and their effects on the European society</li> </ul>			
<ul style="list-style-type: none"> <li>Define and use correctly the concepts/terms:                             <ul style="list-style-type: none"> <li>explorers, exploration, conquer, Columbus, migration, Prince Henry, navigate, expedition, New World, compass, astrolabe, quadrant, caravel, cartography</li> </ul> </li> <li>Examine the developments in Europe that lead to exploration</li> <li>Identify outstanding European explorers and the places they explored</li> <li>Arrange using a table the arrival and settlements of European nations in the New World</li> </ul>	Interconnectivity between Humankind and the Past	3	4
<ul style="list-style-type: none"> <li>Define and use correctly the concepts/ terms:                             <ul style="list-style-type: none"> <li>Reformation, Pope, Rome, Latin, Anglo-Saxons, clergy, clerics, priests, monks, nuns, abbeys, Martin Luther, Ninety-five Theses, Middle Ages, Roman</li> </ul> </li> </ul>	Interconnectivity between Humankind and the Past	3	4

HISTORY – GRADE 8			
Major Objectives	Strands	Terms	Units
<p>Catholic Church, excommunication, Diet of Worms, Counter Reformation, Cardinals, Ignatius Loyola, Protestant, heresy, heretic, indulgences, friars, archbishop, bishops, synods, diocesan, monasteries, sacraments, Jesuits</p> <ul style="list-style-type: none"> <li>• Examine the influence of Martin Luther and other significant personalities on the Reformation</li> <li>• Discuss the effects of the Reformation on European society in the Sixteenth century</li> <li>• Be tolerant of the religious views and practices of others</li> </ul>			

# GRADE 9

<i>Grade 9—Caribbean History</i>		
<b>Strands/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
Discovering the nature, elements, and importance of History through Historical research	-	-
Continuity and Change	-	-
Encounters, Conflicts and Revolutions	55	33
The Interconnectivity between Humankind and the Past	28	15
<b>Total</b>	<b>83</b>	<b>48</b>

*N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.*

HISTORY – GRADE 9			
Major Objectives	Strands	Terms	Units
<p>Define concepts /term</p> <ul style="list-style-type: none"> <li>revolution, agrarian, industrial, economic, political revolution, technological innovations, seed drill, crop rotation, enclosure movement, marling, medieval</li> </ul> <p>Explain the factors that influenced the Agrarian Revolution in Britain</p> <p>Examine the changes/effects of the Agrarian Revolution on the British society and economy between 1701 and 1850</p> <p>Discuss the Caribbean contribution to the Industrial Revolution in Britain</p> <p>Assess the effects of the Industrial Revolution on the Caribbean</p> <p>Show appreciation for the changes that occurred as a result of the Agrarian and Industrial Revolutions</p>	Encounters, Conflicts and Revolutions	1	1
<ul style="list-style-type: none"> <li>Define the following concepts: <ul style="list-style-type: none"> <li>creole, Frenchman Creole, Frenchman, Africanorn, Creole black, colony, colonists, colonialist, petit blancs, grand blancs, monarchy, republicans, free coloured, constitution, imperialism, mulattoes</li> </ul> </li> </ul>	Encounters, Conflicts and Revolutions	1	2

HISTORY – GRADE 9			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Identify the factors which caused the revolution in St. Domingue</li> <li>Analyse role of Toussaint in the execution of the Haitian Revolution</li> <li>Assess the effects of the Haitian revolution on Haiti and the wider Caribbean</li> </ul>			
<ul style="list-style-type: none"> <li>Define the following concepts/terms:                             <ul style="list-style-type: none"> <li>revolution, imperialism, nationalism, decolonization, communism, conflict, nationalist, liberator, dictator</li> </ul> </li> <li>Explain the causes for the Cuban Revolution and the consequences on the country and the wider Caribbean</li> <li>Examine the role of Fidel Castro as a liberator</li> <li>Interpret sequence of events, time periods, chronology and trends evident in the Cuban Revolution</li> </ul>	Encounters, Conflicts and Revolutions	1	3
<ul style="list-style-type: none"> <li>Define the following concepts/terms:</li> </ul>	Encounters, Conflicts and Revolutions	1	4

HISTORY – GRADE 9			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>○ revolution, imperialism, nationalism decolonization, communism, conflict, nationalist, liberator, dictator</li> <li>• Examine the concern of the US regarding the Grenadian revolution</li> <li>• Discuss the consequences of United States intervention in Grenada in 1983</li> <li>• Assess the effects of the Grenada Revolution on Grenada and on the wider Caribbean</li> </ul>			
<ul style="list-style-type: none"> <li>• Define the following concepts/terms:                             <ul style="list-style-type: none"> <li>○ taxation, petition, peasants, delegation, martial law, riot act, ammunition, riot, rebellion, constitution, custos</li> </ul> </li> <li>• Discuss the factors that led to the Morant Bay Rebellion</li> <li>• Assess the effects of the Morant Bay Rebellion on Jamaica and on the wider Caribbean</li> </ul>	Encounters, Conflicts and Revolutions	1	5

HISTORY – GRADE 9			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Identify the major personalities involved in the Morant Bay Rebellion</li> </ul>			
<ul style="list-style-type: none"> <li>Describe the relationship between Britain and her North American colonies before the outbreak of the America War of Independence.</li> <li>Categorize the factors that led to the American War of Independence</li> <li>Discuss the significance of the slogan “No Taxation, Without Representation”</li> <li>Examine the results of the American Revolution</li> <li>Assess the effects of the American War of Independence on Jamaica</li> </ul>	Encounters, Conflicts and Revolutions	2	1
<ul style="list-style-type: none"> <li>Evaluate the factors that led to the outbreak of World War 1</li> <li>Examine the results of World War 1</li> <li>Demonstrate understanding of Jamaica’s involvement in the War</li> </ul>	Encounters, Conflicts and Revolutions	2	2



HISTORY – GRADE 9			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Assess the factors that led to the outbreak of World War 11</li> <li>Examine the results of World War 11</li> <li>Discuss Jamaica's involvement in the World War 11</li> </ul>	Encounters, Conflicts and Revolutions	2	2
<ul style="list-style-type: none"> <li>Assess the philosophies of Garvey, Gandhi and Mandela</li> <li>Analyse the principles of Garvey's Universal Negro Improvement Association - African Communities league (UNIA-ACL)</li> <li>Discuss Gandhi's response to British economic domination in India</li> <li>Analyse the strategies used by Mandela and the African National Congress (ANC) to end apartheid</li> <li>Evaluate the contribution of the nationalist figures/ liberators to their nation and the world</li> </ul>	The Interconnectivity between Humankind and the Past	3	1
<ul style="list-style-type: none"> <li>Assess the contributions of outstanding personalities named above to the West Indies Federation</li> </ul>	The Interconnectivity between Humankind and the Past	3	2

HISTORY – GRADE 9			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Analyse the factors that led to establishment of the West Indies Federation</li> <li>Discuss the reasons for the failure of the British West Indies Federation</li> <li>Evaluate the consequences of the breakdown of the West Indies Federation</li> <li>Demonstrate willingness to work cooperatively</li> </ul>			
<ul style="list-style-type: none"> <li>Analyse the circumstances which led to independence in the British Caribbean</li> <li>Identify outstanding personalities who were associated with independence in the British Caribbean countries</li> <li>Assess the role played by persons who emerged as leading political figures in the respective countries of the British Caribbean</li> <li>Evaluate the impact of independence on the Jamaican society</li> </ul>	The Interconnectivity between Humankind and the Past	3	3

HISTORY – GRADE 9			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Appreciate the contribution of key personalities associated with Independence in the British Caribbean</li> </ul>			

# RELIGIOUS EDUCATION



Teachers have the freedom to utilize the objectives from the Grades 7-9 NSC Religious Education Guide. The curriculum is available at <https://pep.moey.gov.jm/>

# DRAMA

## GRADE 7

<i>Grade 7--Drama</i>		
<b>Strands/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
Exploring and Creating	43	11
Expressing and Enacting	17	6
Appreciating and critiquing	22	8
<b>Total</b>	<b>82</b>	<b>25</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

DRAMA – GRADE 7			
Major Objectives	Strands	Terms	Units
Examine the fact that experiences can be used imaginatively to create new situations	Appreciating and critiquing	1	1
Critique formulated definition/s of Drama against given standards of a comprehensive definition			
Recognize the importance of the senses in developing a creative imagination		1	2
Recognise the importance of the body as an instrument for dramatic work			
Recognize the importance of listening and speaking as a discipline necessary for successful completion of tasks			
Demonstrate high level of responsibility and trustworthiness with respect to others' experience		2	1
Demonstrate a willingness to accept constructive criticism			
Understand the diversity of opinion which exists among individuals particularly in larger groups		2	3
Differentiate between short term and long-term goals	<i>Exploring and Creating</i>	1	1
Demonstrate knowledge of basic stage terminologies relating to space			
demonstrate an awareness of the voice as a versatile instrument of communication, expression and interpretation		1	2
Identify a range of physical skills and ways in which these skills might be further extended in creating dramatic situations			
Examine the nature of trust and responsibility		2	2

DRAMA – GRADE 7			
Major Objectives	Strands	Terms	Units
Examine the appropriateness of sound and sound effects to movement		3	1
Examine how experiences can be used as stimuli to create simple episodes			
Construct, separate then reassemble a tableau			2
Discover how language facilitates dramatic action			
Recognize the voice as an instrument to convey meaning			
Use simple costumes effectively to enhance characterization			3
Portray characters from different cultures in varying situations	Expressing and Enacting	1	1
Use cultural practices to present a scenario, demonstrating the elements of drama			
Examine the nature and function of gestures, facial and body expression		2	1
Demonstrate the effectiveness, dynamics and importance of pair work			
Cooperate with others in the development and successful completion of projects		2	2
Understand and use persuasive language for impact and clarity			

**GRADE 8**

<i>Grade 8—Drama</i>		
<b>Strands/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
Exploring and Creating	36	6
Expressing and Enacting	20	3
Appreciating and critiquing	19	2
<b>Total</b>	<b>75</b>	<b>11</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***



DRAMA – GRADE 8			
Major Objectives	Strands	Terms	Units
Use external decorations and simple properties to create character	Exploring and Creating	1	1
Design, construct and decorate simple masks			
Develop or write a simple scene individually or with others	Exploring and Creating	2	2
Examine and explain the difference ways in which language is used in different situations	Exploring and Creating	2	2
Develop or write a simple dramatic scene	Exploring and Creating	2	3
Understand how to create a dramatic setting using symbolic representations	Exploring and Creating	3	2
Explain the difference between the strategies and devices used in communicating drama and interpersonal communication	Expressing and Enacting	1	2
Use improvisation to explore issues which have implications for personal relationships (i.e.) social and moral issues		2	1
Demonstrate emotional changes in character		3	1
Value the efforts of others and be supportive of them	Appreciating and critiquing	2	1
Assess the importance of sequencing in storytelling and dramatic plots		2	3

**GRADE 9**

<i>Grade 9—Drama</i>		
<b>Strands/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
Exploring and Creating	39	7
Expressing and Enacting	3	0
Appreciating and critiquing	14	0
<b>Total</b>	<b>56</b>	<b>7</b>

***N.B.** Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.*

DRAMA – GRADE 9			
Major Objectives	Strands	Terms	Units
Demonstrate how objects can suggest historical/social environments	Exploring and Creating	1	1
Find ways to create tension in Drama			
Discuss the relationship between text and context		1	3
Make use of objects, space and body symbolically		2	1
Examine how symbolic language used in a play affected the development of the plot		2	2
Use contrasts in sound and silence; movement and stillness; lightness and darkness in the creation of dramatic work		2	2
Maintain a working note book which highlights the responsibility each individual has to the successful completion of a drama project		3	2

# MUSIC

## GRADE 7

<i>Grade 7—Music</i>		
<b>Strands/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
Vocal and Instrumental Development	12	3
Signs, Symbols & Notations	7	2
Musical Genres & Styles	5	1
Listening, Identifying, Distinguishing	11	1
Communicating & Recording Musical Compositions	20	2
<b>Total</b>	<b>55</b>	<b>9</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

MUSIC – GRADE 7			
Major Objectives	Strands	Terms	Units
Sing a widening repertoire of unison and parts-songs that present moderate challenges in breathing, phrasing, diction, duration and dynamics	Vocal and Instrumental Development	1	1
Develop basic technical competence on melodic and non-melodic instruments			
Read /interpret a musical score when performing vocal and instrumental music (beat values and multiples and the divided beat)			
Read/interpret a musical score when performing vocal and instrumental music	Signs, Symbols & Notations	2	1 & 2
Use conventional notation with increasing accuracy to record their compositions			
Sing a repertoire of Jamaican folk/pop songs with attention to breathing, phrasing, diction, duration, expression and dynamics.	Musical Genres & Styles	3	3
Identify/discuss similarities and contrasts in musical examples.	Listening, Identifying, Distinguishing	3	3
Devise suitable alternative notations for their compositions.	Communicating & Recording Musical Compositions	1	1
Discuss, explain and demonstrate their musical ideas.		1	2

### Comments

There are three other strands outlined in the NSC for Music:

- Solo and group Performance
- Similarities & Contrasts in Musical Genres/Styles
- Exploring, Selecting, Organising

However, these strands can be subsumed under the ones outlined.

# **GRADE 8**

<i>Grade 8—Music</i>		
<b>Strand/Theme</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
Vocal and Instrumental Development	15	2
Signs, Symbols & Notations	2	1
Musical Genres & Styles	6	1
Listening, Identifying, Distinguishing	8	1
Communicating & Recording Musical Compositions	14	1
<b>Total</b>	<b>45</b>	<b>6</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

MUSIC – GRADE 8			
Major Objectives	Strands	Terms	Units
Sing with understanding, an increasing range of songs (unison and part) displaying ability to control pitch, duration, diction, phrasing and dynamics.	Vocal and Instrumental Development	1	1
Competently manipulate classroom instruments used in Jamaican folk forms (e.g., maracas, conga drum, rhumba box, bamboo scraper, and guitar).			
Sing/Play a wide range of music, from a score (nonconventional/conventional notation)	Signs, Symbols & Notations	2	3
Critique music (vocal/instrumental) to display understanding of musical elements used within musical genres and styles	Musical Genres & Styles	3	3
Listen to different genres of music, recognizing a range of musical instruments and distinguishing musical elements	Listening, Identifying, Distinguishing	1	1
Compose solo and ensemble music using a wide range of sound sources	Communicating & Recording Musical Compositions	3	1

### Comments

There are three other strands outlined in the NSC for Music:

- Solo and group Performance
- Similarities & Contrasts in Musical Genres/Styles
- Exploring, Selecting, Organising

However, these strands can be subsumed under the ones outlined.

# GRADE 9

<i>Grade 9—Music</i>		
<b>Strands/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
Vocal and Instrumental Development	16	3
Signs, Symbols & Notations	3	1
Musical Genres & Styles	6	1
Listening, Identifying, Distinguishing	8	1
Communicating & Recording Musical Compositions	19	2
<b>Total</b>	<b>52</b>	<b>8</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***



MUSIC – GRADE 9			
Major Objectives	Strands	Terms	Units
Present vocal music expressively and with growing assurance and competence	Vocal and Instrumental Development	1	1
Play classroom and folk instruments with increasing dexterity and control of sound			
Sing/play short solo pieces or individual parts with fluency and expression			
Display growing ability to read from a score (conventional and nonconventional notation) to include the 3:3:2 rhythmic framework of the Caribbean	Signs, Symbols & Notations	2	2
Relate texture, timbre and structure to the genre/style of the music.	Musical Genres & Styles	2	1
Relate texture, timbre, structure to the genre/style of the music to which they listen (folk, gospel, Western Art, pop).	Listening, Identifying, Distinguishing	2	2
Create melodies which must be played or sung to a given genre/style	Communicating & Recording Musical Compositions	1	2
Create a widening range of accompaniments for songs and Instrumental pieces.		2	1
Improvise on folk, pop, gospel, Western Art music		2	1

### Comments

There are three other stands outlined in the NSC for Music:

- Solo and group Performance
- Similarities & Contrasts in Musical Genres/Styles
- Exploring, Selecting, Organising

However, these strands can be subsumed under the ones outlined.

# PHYSICAL EDUCATION

## GRADE 7

<i>Grade 7—Physical Education</i>		
<b>Strands/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
<i>Movement Education</i>	20	8
<i>Games and Sport</i>		
<i>Health, Safety and Well-being</i>		
<b>Total</b>		

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

PHYSICAL EDUCATION – GRADE 7			
Major Objectives	Strands	Terms	Units
Demonstrate refined running skills and technique in track and field.	Games and Sport  Health, Safety and Wellbeing	2	1
Demonstrate basic skills of jumping and throwing in track and field			
Demonstrate basic skills in cricket and break them down into phases (preparation, action, follow-through and recovery).		2	2
Demonstrate competence in performing volleyball skills.		3	2
Participate cooperatively in a variety of volleyball minor games.		3	1
Create movement sequences using choreographic forms, individually and with others		3	1
Enter the water / Climb out of water / Perform breathing exercises and floating techniques / forward and backward glides / front crawl		3	2
Apply baseball skills in mini competitions.		3	2

# **GRADE 8**

<i>Grade 8—Physical Education</i>		
<b>Strand/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
Movement Education	20	9
Games and Sport		
Health, Safety and Well-being		
<b>Total</b>		

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

PHYSICAL EDUCATION – GRADE 8			
Major Objectives	Strands	Terms	Units
Demonstrate proper coordination of arms and legs while running on the straight, the curve, in lanes, and crossing over at the appropriate time	Games and Sport  Health, Safety and Wellbeing	2	1
Develop and refine the phases suitable for the execution of the long jump and high jump.		2	1
Identify and demonstrate the phases suitable for the execution of hurdling.		2	1
Demonstrate proper coordination of arms and legs while running on the straight, the curve, in lanes, and crossing over at the appropriate time		2	1
Develop and refine the phases suitable for the execution of the long jump and high jump.		2	1
Demonstrate proper shooting and passing techniques, in Basketball, as well as knowledge of the rules in game situations (e.g. lay-up shot; overhead pass		2	2
Demonstrate an appreciation for the rules governing the game (Cricket/Lawn Tennis) and the sporting tradition in which it is played.		2	2
Apply various Volleyball playing systems such as 3-5-2, 3-4-3 to different situations.		3	1
Demonstrate the ability to debate constructively on given swimming and baseball/softball topics that are current.		3	2

## GRADE 9

<i>Grade 9—Physical Education</i>		
<b>Strands/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
Movement Education	20	7
Games and Sport		
Health, Safety and Well-being		
<b>Total</b>		

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

PHYSICAL EDUCATION – GRADE 9			
Major Objectives	Strands	Terms	Units
Design and perform gymnastic sequences that combine travelling, rolling, balancing and weight transfer into smooth flowing sequences.	Movement Education  Games and Sport   Health, Safety and Wellbeing	2	1
Execute a wide variety of stunts and tumbling skills		2	1
Refine and apply basketball skills learned.		2	2
Develop good coordination in executing the different throws. (shot put, discus, javelin)		2	1
Refine and further develop correct techniques for all cricket/Lawn Tennis skills learned.		2	2
Utilize offensive and defensive Volleyball/Hockey strategies in a game.		3	1

**Comments**

The column with labeled *Number of objectives* was omitted because the Physical Education curriculum has several sports that are done each term. Note also that some of these sporting disciplines are not taught by all schools because of the absence of resources. For example, only a few schools can teach swimming based on the fact that they have access to a pool.

# FRENCH/ SPANISH

## GRADE 7

### FRENCH/SPANISH - GRADE 7

Themes	Major Objectives	Terms	Units	Number of Major Objectives
<b>Conociéndonos/ Se connaître: Getting to know each other</b>	<p>Compare forms of greetings, traditions, customs and celebrations in Hispanic/ Francophone and Jamaican cultures</p> <p>Make simple requests or comments using classroom expressions and expressions of courtesy</p> <p>Use, and respond appropriately to basic greetings and farewells</p> <p>Name at least 5 countries that speak Spanish/ French and their capitals and corresponding nationalities.</p>	1	<p>1 (Spanish)</p> <p>3 (French)</p>	4
	Introduce themselves using additional appropriate expressions	1	<p>1 (French)</p>	5



FRENCH/SPANISH - GRADE 7				
Themes	Major Objectives	Terms	Units	Number of Major Objectives
	<p>Ask for and provide basic information using appropriate vocabulary and grammar</p> <p>Read and complete simple forms requesting basic personal information (name; country/origin; nationality, address, age, date of birth etc.)</p> <p>Listen to questions about personal information and give appropriate responses</p> <p>Describe themselves using basic descriptive adjectives</p>		2 (Spanish)	
	<p>Provide simple physical and personal descriptions of family members</p> <p>Describe the professions of family members</p> <p>Compare own family life and celebrations with those of a family in one named Hispanic / Francophone country</p>	1	3 (Spanish)  2 (French)	

FRENCH/SPANISH - GRADE 7				
Themes	Major Objectives	Terms	Units	Number of Major Objectives
¿Cómo estoy y dónde estoy? / How am I and Where am I?  Où suis-je? Where am I?	State different ailments being experienced  Describe their emotional states using <i>estar/ être</i> to be  Make enquiries about health	2	1	3
	Describe their house and some furniture using simple adjectives, including colours  Describe household chores using the appropriate grammatical structure appropriately to respond to a variety of questions  Listen to short texts based on the topic and select appropriate responses to questions based on the text	2	2	3
	State where different places are located  Say what time they have lunch  Talk about the subjects that are done in school	2	3	5

FRENCH/SPANISH - GRADE 7				
Themes	Major Objectives	Terms	Units	Number of Major Objectives
	<p>Explain why they like/dislike a subject, school etc.</p> <p>Describe school activities, including extracurricular activities.</p>			
<p><b>Mi Rutina Diaria – My Daily Routine</b></p> <p><b>Ma journée typique</b></p>	<p>State at what time routine activities are done</p> <p>Express activities at home and at school as parts of a daily schedule</p>	3	1	2
	<p>Describe their recreational activities using appropriate expressions of frequency</p> <p>Extend simple invitations using appropriate expressions</p> <p>Order basic food and drink items using learned vocabulary and structures</p> <p>Describe basic weather conditions using appropriate expressions</p>	3	2	4

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# GRADE 8

FRENCH/SPANISH - GRADE 8				
Themes	Major Objectives	Terms	Units	Number of Major Objectives
<b>El mundo de trabajo y la salud/ The World of Work and Health</b>  <b>Le Monde du Travail /The World of Work</b>	<p>Identify jobs and professions in their communities</p> <p>Communicate orally and in writing in Spanish about their possible career choice</p> <p>Create daily schedules in Spanish</p>	1	1	3
	<p>Identify a number of bodily ailments</p> <p>Effectively describe pain and ailments using the appropriate structures and vocabulary</p> <p>Give simple advice and instructions using the familiar form</p> <p>Express sympathy to persons who are ill</p>	1	2	4

FRENCH/SPANISH - GRADE 8				
Themes	Major Objectives	Terms	Units	Number of Major Objectives
<b>Andanzas y diversiones/ Adventures</b> <b>Ce que j'aime faire</b> <b>Things I like to Do</b>	Identify names of food items found on a menu Name the different meals Place an order using a menu Calculate a bill including the tip	2	1	4
	Utilize polite expressions Differentiate shops/stores by goods sold Ask and respond to questions appropriate to shopping Describe products and what others are wearing Compare items and prices	2	2	5
	Discuss pastime activities indicating their likes and dislikes and those of others  State reasons for liking a particular hobby/sport and sport personality using appropriate grammatical structures  State what pastime activity is being done	2	3	3
<b>El medio ambiente/ The Environment</b>	Communicate travel plans	3	1 (Spanish)	3

FRENCH/SPANISH - GRADE 8				
Themes	Major Objectives	Terms	Units	Number of Major Objectives
<b>Mon environnement</b>	Ask and give directions in Spanish/ French  Describe places of interest and the pastime activities that take place at that location		2 (French)	
	Describe basic weather conditions using the appropriate expressions  Compare seasonal activities done in the Hispanic/ French culture with those done in Jamaica at the same time  Create simple short-term weather forecasts	3	2	3
	Name and describe animals and plants  Use simple negative and positive commands to give instructions  Discuss natural disasters and environmental protection	3	3	3

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Curriculum Analysis: Essential Objectives & Content Focus-NSC Grades 7-9, 2<sup>nd</sup> Edition

FRENCH/SPANISH - GRADE 9				
Themes	Major Objectives	Terms	Units	Number of Major Objectives
	compose/preterite			
	<p>Apply suitable language expressions to express future actions and events</p> <p>Communicate effectively with classmates telling them about their plans for the future</p> <p>Use appropriate forms of the future tense in describing future events</p> <p>Respond appropriately to questions by selecting the appropriate tense</p>	2	2	4
<b>La Comunicación/ Communication</b>  <b>La Communication</b>	<p>Ask and answer questions about personal communications devices</p> <p>Compare and express opinions about personal communications devices</p>	3	1  2	2



# VISUAL ARTS

## GRADE 7

Grade 7 Visual Arts			
Major Objectives	Strands	Terms	Units
<p><b><u>Exploring Designs</u></b></p> <ul style="list-style-type: none"> <li>• Evaluate own design and that of others using the principles of design</li> <li>• Identify design patterns and trends and use them to modify personal designs</li> <li>• Create and develop designs inspired by the environment</li> <li>• Apply the elements and principles of design to solve design problems and produce aesthetically pleasing designs</li> </ul>		1	1
<p><b><u>Thematic Approach to Design</u></b></p> <ul style="list-style-type: none"> <li>• Define and identify themes in works of art.</li> <li>• Express mood in the work of art through the use of the elements and principles of design.</li> <li>• Use themes to create works of art.</li> <li>• Develop logical and creative thinking by exploring ideas through the use of a theme.</li> </ul>		1	2
<p><b><u>Social Issues Related to Design</u></b></p> <ul style="list-style-type: none"> <li>• Demonstrate the development of a design from its conceptual stage to completion</li> <li>• Judge and evaluate designs based on the purpose for which they were created</li> </ul>		1	3

Grade 7 Visual Arts			
Major Objectives	Strands	Terms	Units
<ul style="list-style-type: none"> <li>Plan ,design and create art in relationship to themes , ideas, cultural expressions and symbolisms</li> <li>Communicate design concepts through the manipulation of the elements of design</li> </ul>			
<p><b><u>Design Evaluation</u></b></p> <ul style="list-style-type: none"> <li>Outline the stages of the design process</li> <li>Select a popular product and redesign to appeal to popular culture</li> <li>Conduct a research on the evolution of a product that is currently being used.</li> <li>Analyze and evaluate a product design using established criteria</li> </ul>		1	4

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<b>Grade: 7 Visual Arts</b> <b><u>Drawing</u></b> <b>TERM 2 UNIT 1</b>			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>• Apply perspective techniques in the creation of design</li> <li>• Create a form containing positive and negative space</li> <li>• Develop basic skill in handling drawing tool</li> <li>• Identify ways in which drawing documents human development</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	2	1

<b>Grade: 7 Visual Arts</b> <b><u>Picture Making</u></b> <b>TERM2 UNIT 2</b>			
Major Objectives	Strand	Term	Unit
<ul style="list-style-type: none"> <li>• Produce design solutions for project execution</li> <li>• Evaluate own design and that of others using the principles of design</li> <li>• Create and develop designs inspired by the environment</li> <li>• Apply the elements and principles of design to solve design problems and produce aesthetically pleasing design</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	2	2

<b>Grade: 7 Visual Arts</b> Experiencing Three-Dimension <b>TERM 2 UNIT 3</b>			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>• Write definitions for form and function</li> <li>• Make objects to reflect personal expression</li> <li>• Reflect culture and form in a chosen quick working medium</li> <li>• Analyze the relationship between objects and space in three dimensional art</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	2	3

<b>Grade: 7 Visual Arts</b> Printmaking <b>TERM 3 UNIT 1</b>			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>• Create unique and original works on paper</li> <li>• Research printmaking artists and different kinds of prints</li> <li>• Assessing works on paper and techniques in printmaking</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	3	1

<b>Grade: 7 Visual Arts</b> Surface Design <b>TERM 3 UNIT 2</b>			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>Identify and demonstrate the different types of pattern arrangements.</li> <li>Recognise symbols from other cultures and incorporate them in their designs.</li> <li>Create designs using themes.</li> <li>Illustrate different surface decoration techniques on paper and fabric.</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	3	2

<b>Grade: 7 Visual Arts</b> Graphic Design <b>TERM 3 UNIT 3</b>			
Major Objectives	Strand	Term	Unit
<ul style="list-style-type: none"> <li>Develop students' awareness to Graphic design and its role in communication in our environment</li> <li>Identify the five basic lettering styles e.g. Block, Italic, Gothic and Roman.</li> <li>Identify the upper and lower case lettering and writing in formal hand.</li> <li>Design an original lettering style in upper case and lower case.</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	3	3

# GRADE 8

Grade 8 Visual Arts			
Major Objectives	Strands	Term	Unit
<p><b><u>Learning from the Masters</u></b></p> <ul style="list-style-type: none"> <li>• Examine and discuss the use of elements and principles of design in works created by 20th century masters.</li> <li>• Produce a pastiche</li> <li>• Identify various art movements that have influenced local artists</li> <li>• Use successful search strategies to locate relevant information on the Internet about the elements and principles of design in works created by 20th century masters</li> </ul>		1	1
<p><b><u>Art Movements</u></b></p> <ul style="list-style-type: none"> <li>• List the various art movements of the twentieth century of each art movement</li> <li>• Evaluate the common principles or philosophies that govern specific art movements</li> <li>• Describe the impact of the various art movements on local artists</li> <li>• Compare and contrast the use of elements and principles in selected twentieth century Art</li> <li>• Use appropriate search strategies to locate relevant information</li> </ul>		1	2
<p><b><u>Mixed Media</u></b></p> <ul style="list-style-type: none"> <li>• Create works of art based on a given theme through the combination of a variety of media</li> <li>• explore different techniques for creating a mixed-media painting</li> <li>• identify and discuss mixed-media artworks produced by Jamaicans or Caribbean artists</li> </ul>		1	3

Grade 8 Visual Arts			
Major Objectives	Strands	Term	Unit
<p><b><u>Drawing</u></b></p> <ul style="list-style-type: none"> <li>• Define terms related to drawing using linear perspective</li> <li>• Recognize the function of perspective in a work of art</li> <li>• Create drawings using the techniques of linear perspective</li> <li>• Discuss the various perspective techniques observed in local and international works of art</li> </ul>		1	4

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Grade: 8 Visual Arts Life Drawing TERM 2 UNIT 1			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>• Use contour lines to draw the human figure</li> <li>• Research and define the terms portrait and figure drawing</li> <li>• Select and use appropriate toning techniques and applications for individual artwork</li> <li>• Draw a portrait of a classmate or family member using construction lines to add feature</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	2	1

<b>Grade: 8 Visual Arts</b> <b>Product Design</b> <b>TERM 2 UNIT 2</b>			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>Examine the concepts of functional and non-functional art</li> <li>Construct and redesign an existing product with the use of unconventional materials</li> <li>Employ use of the principles of design in the creation of functional 3D products</li> <li>Appraise a work of art based on its cultural value</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	2	2

<b>Grade: 8 Visual Arts</b> <b>Graphic Design</b> <b>TERM 2 UNIT 3</b>			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>Investigate the history, development and impact of logo on society</li> <li>Demonstrate layout skills for graphic designs</li> <li>Create logos by combining lettering and symbols</li> <li>Identify the role of graphic design in communication</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	2	3



<b>Grade: 8 Visual Arts</b> <b>Graphic Design</b> <b>TERM 3 UNIT 1</b>			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>Identify the different types of posters</li> <li>Select appropriate lettering and illustration for a specific poster.</li> <li>Demonstrate the ability to do photo editing using computer software</li> <li>Use Computer Aided Design (CAD) software appropriately</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	3	1

<b>Grade: 8 Visual Arts</b> <b>Printmaking</b> <b>TERM 3 UNIT 2</b>			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>Produce creative and original prints</li> <li>Make edition prints</li> <li>Apply the techniques of various artists to printmaking</li> <li>Analyse the nature and value of culture in printmaking</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	3	2

<b>Grade: 8 Visual Arts</b> Surface Decoration/Fiber Arts <b>TERM 3 UNIT 3</b>			
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>Identify the various surface decoration and weaving techniques</li> <li>Demonstrate and manipulate techniques in textile to create works of art</li> <li>Analyze the use of elements and principles in textile design / fibre arts</li> <li>Appraise the value and function of textile art within their culture</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	3	3

# GRADE 9

Grade 9 Visual Arts			
Major Objectives	Strands	Term	Unit
<p><b><u>Drawing as Documentation</u></b></p> <p>Identify and use a variety of drawing media and techniques</p> <ul style="list-style-type: none"> <li>• Draw from observation</li> <li>• Use drawing as a form of documentation</li> <li>• Create aesthetically pleasing designs based on given themes</li> <li>• Demonstrate an understanding for the use of line and tone in producing a drawing</li> </ul>		1	1
<p><b><u>Communicating Through Graphics</u></b></p> <p>Differentiate between a package and a product</p> <ul style="list-style-type: none"> <li>• Design packages for products</li> <li>• Demonstrate the processes used in designing a package for a product</li> <li>• Use image capturing device to document appropriate images for class critique</li> <li>• Make timely post to class blog</li> </ul>		1	2
<p><b><u>Painting and Mixed Media</u></b></p> <p>Use colour as a means of organizing a composition</p> <ul style="list-style-type: none"> <li>• Select the correct painting process for expressions</li> <li>• Create art work using colour theories</li> </ul>		1	3
<p><b><u>Careers in Visual Arts</u></b></p> <ul style="list-style-type: none"> <li>• Examine career opportunities in the visual arts to determine requisite skills, qualifications, training opportunities, supply and demand, market location and potential earnings.</li> <li>• Develop a personal artist statement.</li> <li>• Design a career chart.</li> <li>• Create a digital portfolio of own works.</li> <li>• Analyse and compare visual arts related careers, considering economic, social, and cultural issues to define their significance and purpose.</li> </ul>		1	4

Grade 9 Visual Arts			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>• Match activities to visual arts related career titles.</li> <li>• Interview/research one professional and make conclusions and judgments about the value of his/her work to society.</li> </ul>			

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<b>Grade: 9 Visual Arts</b> <b>Drawing as Expression</b> <b>TERM 2 UNIT 1</b>			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>• Use symbols and colour to express mood in a work of art</li> <li>• Create a work of art that reflects knowledge of different drawing styles and techniques</li> <li>• Critique and discuss their work and that of others using a class developed rubric</li> <li>• Demonstrate an understanding of the concept of copyright</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	2	1

<b>Grade: 9 Visual Arts</b> <b>Printmaking</b> <b>TERM 2 UNIT 2</b>			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>• Create prints with concept and originality</li> <li>• Express concepts through various techniques related to printmaking</li> <li>• Discuss and illustrate the nature and value of culture in printmaking</li> <li>• Interrelate and judge each other's prints</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	2	2

<b>Grade: 9 Visual Arts</b> <b><u>Fibre and Decorative Arts</u></b> <b>TERM 2 UNIT 3</b>			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>• Create functional or none functional art</li> <li>• Create art pieces that are of a natural or historic nature</li> <li>• Use local materials in unique and innovative ways</li> <li>• Demonstrate the use of form and function in the use of fibre and decorative arts</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	2	3

<b>Grade: 9 Visual Arts</b> <b><u>Graphics Design - Developing Competence in Drawing</u></b> <b>TERM 3 UNIT 1</b>			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>• Depict current events by creating a cartoon.</li> <li>• Examine and discuss drawings and cartoons as social commentary.</li> <li>• Draw to perspective interiors of buildings.</li> <li>• Identify and use processes in drawing still composition and parts of the body.</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	3	1

<b>Grade: 9 Visual Arts</b> <b><u>Ceramics</u></b> <b>TERM 3 UNIT 2</b>			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>• Research and prepare a report on traditional pottery</li> <li>• Manipulate tools and materials safely</li> <li>• Create works of art which respond to specific requirements</li> <li>• Use a variety of clay techniques to decorate the art work</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	3	2

<b>Grade: 9 Visual Arts</b> <b><u>Sculpture</u></b> <b>TERM 3 UNIT 3</b>			
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>• Develop fundamental skill and techniques in sculpture</li> <li>• Discuss and document information about artists, era and movements</li> <li>• Analyse the impact of form and space in the designing of sculpture</li> <li>• Discuss their work in relation to other artists and their work</li> </ul>	Design Aesthetics Art creation History & Culture Criticism	3	3

# RESOURCE & TECHNOLOGY

## AGRICULTURE

### GRADE 7

Agriculture and the Environment- Grade 7		Term One
Strand/Theme	Number of Objectives	Number of “major” objectives
Creativity and Innovations	5	2
Explore Methods& Procedures	5	2
Apply Solution	6	4
Career Pathways	4	2
<b>TOTAL</b>	<b>20</b>	<b>12</b>

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<p><b>AGRICULTURE AND THE ENVIRONMENT – GRADE 7 -Term 1</b></p> <p><b>GROW VEGETABLES IN SOIL AND SOILLESS MEDIA</b></p>			
Major Objectives	Strand	Term	Unit
<ul style="list-style-type: none"> <li>• Create and apply the design principles to growing crops in a soil based and a soilless media</li> <li>• Use technology to communicate ideas and information, and work collaboratively to support individual needs and contribute to the learning of others.</li> </ul>	Creativity and Innovations	1	1
<ul style="list-style-type: none"> <li>• Explore methods and procedures for effective production of vegetables in soil or soilless media</li> <li>• Use digital tools to design and develop creative products to demonstrate their learning and understanding of basic technology operations.</li> </ul>	Explore Methods & Procedures	1	1
<ul style="list-style-type: none"> <li>• Select appropriate tools and demonstrate primary and secondary tillage</li> <li>• <b>Verbalize steps and demonstrate:</b> <ol style="list-style-type: none"> <li>i. Care of seedlings - Transplanting - Maintain field sanitation</li> <li>ii. Prepare a grow box or hydroponic system o Select and demonstrate the use of appropriate personal protective equipment</li> </ol> </li> </ul>	Apply Solution	1	1
<ul style="list-style-type: none"> <li>• Develop an awareness of career pathways related to vegetable production</li> <li>• Use appropriate digital tools and resources to plan and conduct career –related research, prepare documents and make presentations.</li> </ul>	Career Pathways	1	1

Agriculture and the Environment- Grade 7 -Term 2		
Strand/Theme	Number of Objectives	Number of “major” objectives
Creativity and Innovations	7	4
Explore Methods& Procedures	5	2
Apply Solution	4	1
Career Pathways	2	2
<b>TOTAL</b>	<b>18</b>	<b>9</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives***

<b>AGRICULTURE AND THE ENVIRONMENT – GRADE 7-Term 2</b> <b>GROW SELECTED CROPS IN SOIL-BASED MEDIUM BY DIRECT SEEDING</b>			
<b>Major Objectives</b>	<b>Strand</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>• Create and apply design principles to growing crops by direct seeding</li> <li>• Develop a simple layout of the field</li> <li>• Establish targets such as budget, expected yield and quality</li> <li>• Evaluate efficiency and environmental impact of processes</li> </ul>	Creativity and Innovations	2	2
<ul style="list-style-type: none"> <li>• Investigate methods and procedures to be used in effectively growing crops by direct seeding</li> <li>• Identify crops, tools and materials required after giving consideration to availability, cost, efficiency and environmental factors.</li> </ul>	Explore Methods& Procedures	2	2
<ul style="list-style-type: none"> <li>• Use design solutions and principles to effectively grow crops by direct seeding while ensuring that sound agronomic practices as well as safe use of tools and materials are observe</li> </ul>	Apply Solution	2	2
<ul style="list-style-type: none"> <li>• Demonstrate an awareness of career pathways/ occupations related to growing crops by direct seeding</li> <li>• Demonstrate acceptable behaviour while working individually or as member of a tea</li> </ul>	Career Pathways	2	2

Grade 7- Agriculture and the Environment -Term 3		
Strand/Theme	Number of Objectives	Number of “major” objectives
Creativity and Innovations	4	2
Explore Methods& Procedures	5	2
Apply Solution	3	2
Career Pathways	2	2
<b>TOTAL</b>	<b>14</b>	<b>8</b>

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<b>AGRICULTURE AND THE ENVIRONMENT – GRADE 7-Term 3</b> <b>REARING BROILER BIRDS</b>			
<b>Major Objectives</b>	<b>Strand</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>• Create and apply design principles to rear broiler birds</li> <li>• Research systems/methods of broiler production online or in storage device</li> </ul>	Creativity and Innovations	3	3
<ul style="list-style-type: none"> <li>• Explore methods and procedures for effective rearing of broiler birds</li> <li>• Create electronic designs of broiler growing facilities</li> </ul>	Explore Methods& Procedures	3	3
<ul style="list-style-type: none"> <li>• Apply design solutions and principles in rearing broiler birds</li> <li>• Create computer graphics, spreadsheets, and other documents related to the broiler project</li> </ul>	Apply Solution	3	3
<ul style="list-style-type: none"> <li>• Develop an awareness of career pathways related to rearing broiler birds</li> <li>• Research related careers online and in storage devices</li> </ul>	Career Pathways	3	3

# GRADE 8

Grade 8- Agriculture and the Environment -Term 1		
Strand/Theme	Number of Objectives	Number of “major” objectives
Creativity and Innovations	3	2
Explore Methods& Procedures	5	2
Apply Solution	5	3
Career Pathways	5	2
<b>TOTAL</b>	<b>18</b>	<b>9</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives***

<b>AGRICULTURE AND THE ENVIRONMENT - GRADE 8- Term 1</b> <b>PRODUCE NEW PLANTS BY VEGETATIVE PROPAGATION</b>			
<b>Major Objectives</b>	<b>Strand</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>• Create and apply design principles to successfully produce plants by vegetative propagation</li> <li>• Use technology to communicate ideas and information, and work collaboratively to support individual needs and contribute to the learning of others.</li> </ul>	Creativity and Innovations	1	1
<ul style="list-style-type: none"> <li>• Explore methods and procedures for effective production of vegetative propagation</li> <li>• Use digital tools to design and develop creative products to demonstrate their learning and understanding of basic technology operations.</li> </ul>	Explore Methods& Procedures	1	1
<ul style="list-style-type: none"> <li>• Apply design solutions and principles to the vegetative propagation plants</li> <li>• Evaluate success of project against established criteria such as percentage survival, quality of new plants produced, use of sustainable practices, efficient use of resources, effective use of local resources.</li> <li>• Use appropriate digital tools and resources to plan and conduct research, aid critical thinking, manage projects, solve problems and make informed decisions.</li> </ul>	Apply Solution	1	1
<ul style="list-style-type: none"> <li>• Develop an awareness of career pathways related to vegetative plant propagation</li> <li>• Use appropriate digital tools and resources to plan and conduct career related research, prepare documents and make presentation</li> </ul>	Career Pathways	1	1

Agriculture and the Environment- Grade 8-Term 2		
Strand/Theme	Number of Objectives	Number of “major” objectives
Creativity and Innovations	7	4
Explore Methods& Procedures	5	2
Apply Solution	4	1
Career Pathways	2	2
<b>TOTAL</b>	<b>18</b>	<b>9</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives***



<b>GRADE 8- AGRICULTURE AND THE ENVIRONMENT- TERM 2</b> <b>RABBIT PRODUCTION</b>			
<b>Major Objectives</b>	<b>Strand</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>• Create and apply design principles to rear rabbits successfully</li> <li>• Use technology to communicate ideas and information</li> <li>• Work collaboratively to support individual needs and contribute to the learning of others</li> </ul>	Creativity and Innovations	2	2
<ul style="list-style-type: none"> <li>• Explore methods and procedures for effective production of rabbits</li> <li>• Use digital tools to design and develop creative products to demonstrate their learning and understanding of basic technology operations.</li> </ul>	Explore Methods & Procedures	2	2
<ul style="list-style-type: none"> <li>• Apply design solutions and principles to the rearing of rabbits</li> <li>• Use appropriate digital tools and resources to plan and conduct research, aid critical thinking, manage projects, solve problems and make informed decisions.</li> </ul>	Apply Solution	2	2
<ul style="list-style-type: none"> <li>• Develop an awareness of career pathways related to the rearing of animals</li> <li>• Use appropriate digital tools and resources to plan and conduct career related research, prepare documents and make presentations</li> </ul>	Career Pathways	2	2

Grade 8- Agriculture and the Environment Term 3		
Strand/Theme	Number of Objectives	Number of “major” objectives
Creativity and Innovations	3	3
Explore Methods& Procedures	3	1
Apply Solution	3	2
Career Pathways	3	1
<b>TOTAL</b>	<b>12</b>	<b>7</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives***

<b>GRADE 8- AGRICULTURE AND THE ENVIRONMENT- TERM 3</b> <b>GROW CROPS WITH EMPHASIS ON SOIL FERTILITY</b>			
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>• Create and apply design principles to grow crops and sustain soil fertility</li> <li>• Produce a simple budget for the project</li> <li>• Generate a simple layout of the project</li> </ul>	Creativity and Innovations	3	3
<ul style="list-style-type: none"> <li>• Investigate and select methods and procedures best suited to grow crops and sustain soil fertility</li> </ul>	Explore Methods& Procedures	3	3
<ul style="list-style-type: none"> <li>• Employ design principles and solutions to growing crops while sustaining soil fertility</li> <li>• Investigate the effect of selected nutrient or combination of nutrients on plant growth production</li> </ul>	Apply Solution	3	3
<ul style="list-style-type: none"> <li>• Cultivate an awareness of career pathways related to crop production and soil fertility</li> </ul>	Career Pathways	3	3

# **GRADE 9**

Grade 9- Agriculture and the Environment Term One		
Strand/Theme	Number of Objectives	Number of “major” objectives
Creativity and Innovations	3	1
Explore Methods& Procedures	4	1
Apply Solution	5	1
Career Pathways	5	1
<b>TOTAL</b>	<b>17</b>	<b>4</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives***

<b>GRADE 9- AGRICULTURE AND THE ENVIRONMENT- TERM 1</b>  <b>Grow crops in controlled or open field environments using Integrated Pest Management Practices.</b>			
<b>Major Objective</b>	<b>Strand</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>Create and design principles to grow crops using integrated pest management practices</li> </ul>	Creativity and Innovations	1	1
<ul style="list-style-type: none"> <li>Explore methods and procedures for effective crop production using integrated pest management</li> </ul>	Explore Methods& Procedures	1	1
<ul style="list-style-type: none"> <li>Apply design solutions and principles to the use of integrated pest management to grow crop</li> </ul>	Apply Solution	1	1
<ul style="list-style-type: none"> <li>Develop an awareness of career pathways related to the growing of crops in open and controlled environment using integrated pest management practices.</li> </ul>	Career Pathways	1	1

<b>Agriculture and the Environment- Grade 9 Term 2</b>		
<b>Strand/Theme</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
Creativity and Innovations	3	1
Explore Methods& Procedures	4	1
Apply Solution	5	1
Career Pathways	5	1
<b>TOTAL</b>	<b>17</b>	<b>4</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives***

<b>GRADE 9- AGRICULTURE AND THE ENVIRONMENT- TERM 2</b> <b>MINI ENTERPRISE</b>			
<b>Major Objectives</b>	<b>Strand</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>Conceptualize, plan and execute innovative entrepreneurial enterprise in selected occupational contexts.</li> </ul>	Creativity and Innovations	2	2
<ul style="list-style-type: none"> <li>Make informed decision in the selection of materials, tools and equipment and demonstrate increasing skill in the execution of task</li> </ul>	Explore Methods& Procedures	2	2
<ul style="list-style-type: none"> <li>Build practical skills and technical competencies necessary for affecting a solution for affecting a solution/outcome</li> </ul>	Apply Solution	2	2
<ul style="list-style-type: none"> <li>Select a career pathway and develop a career plan that outlines the academic and technical requirements for accessing the selected pathway.</li> </ul>	Career Pathways	2	2

Agriculture and the Environment- Grade 9 -Term 3		
Strand/Theme	Number of Objectives	Number of “major” objectives
Creativity and Innovations	3	1
Explore Methods& Procedures	4	1
Apply Solution	4	1
Career Pathways	3	1
<b>TOTAL</b>	<b>14</b>	<b>4</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives***



<b>GRADE 9- AGRICULTURE AND THE ENVIRONMENT- TERM 3</b> <b>MINI ENTERPRISE</b>			
<b>Major Objectives</b>	<b>Strand</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>Conceptualize, plan and execute innovative entrepreneurial enterprise in selected occupational contexts.</li> </ul>	Creativity and Innovations	3	3
<ul style="list-style-type: none"> <li>Make informed decision in the selection of materials, tools and equipment and demonstrate increasing skill in the execution of task</li> </ul>	Explore Methods& Procedures	3	3
<ul style="list-style-type: none"> <li>Build practical skills and technical competencies necessary for affecting a solution for affecting a solution/outcome</li> </ul>	Apply Solution	3	3
<ul style="list-style-type: none"> <li>Select a career pathway and develop a career plan that outlines the academic and technical requirements for accessing the selected pathway.</li> </ul>	Career Pathways	3	3

# FAMILY AND CONSUMER MANAGEMENT

## GRADE 7

Grade 7- Term One		
Resource and Technology- Family and Consumer Management - The Healthy Way		
Strand	Number of Objectives	Number of “major” objectives
Creativity and Innovation	4	2
Explore methods and procedure	5	4
Apply solution	8	4
Career Pathways	1	-
<b>TOTAL</b>	<b>18</b>	<b>10</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

<b>RESOURCE AND TECHNOLOGY- GRADE 7- TERM ONE</b> <b>FAMILY AND CONSUMER MANAGEMENT – THE HEALTHY WAY</b>		
<b>Major Objectives</b>	<b>Strand</b>	<b>Term</b>
<ul style="list-style-type: none"> <li>• Describe the functions, sources and deficiency diseases for each micro- nutrient</li> <li>• Define the term food safety</li> <li>• Explain the importance of promoting food safety</li> <li>• Identify the key components of a recipe</li> <li>• Interpret and use a basic recipe</li> <li>• Evaluate a basic recipe for its accuracy</li> <li>• Classify the methods of cooking</li> <li>• Explain the multi-mix principle</li> <li>• Write menus using the multi-mix principle</li> <li>• Describe the factors that should be considered when planning meals for the family</li> </ul>	Creativity and Innovation  Explore Methods and procedures  Apply Solution	1

Grade 7-Term 2		
Resource and Technology- Family and Consumer Management – Fabrics in Everyday Life		
Strand	Number of Objectives	Number of “major” objectives
Creativity and Innovation	2	2
Explore methods and procedure	3	2
Apply solution	4	2
Career Pathways	1	1
	10	7

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

<b>RESOURCE AND TECHNOLOGY- GRADE 7- TERM TWO</b> <b>FAMILY AND CONSUMER MANAGEMENT – FABRICS IN EVERYDAY LIFE</b>		
<b>Major Objectives</b>	<b>Strand</b>	<b>Term</b>
<ul style="list-style-type: none"> <li>Define terms and concepts associated with fibres and fabrics</li> <li>identify the sources, processing, characteristics, and uses of natural fibres</li> <li>identify small tools and equipment used in constructing sewing projects</li> <li>Identify the parts of the sewing machine and their functions</li> <li>Classify basic stitches and select and construct various types of stitches</li> <li>Employ various methods for creating simple design on fabrics – printing, embroidery, appliqué, painting</li> <li>Explore careers related to the Textile/clothing/fashion Industry</li> </ul>	Creativity and Innovation  Explore Methods and procedures  Apply Solution  Career Pathway	2

Grade 7 -Term 3		
Resource and Technology- Family and Consumer Management – The Family and the Community		
Strand	Number of Objectives	Number of “major” objectives
Creativity and Innovation	2	2
Explore methods and procedure	3	2
Apply solution	4	2
Career Pathways	1	-
	10	6

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives***

<b>RESOURCE AND TECHNOLOGY- GRADE 7- TERM THREE</b> <b>FAMILY AND CONSUMER MANAGEMENT – THE FAMILY AND THE COMMUNITY</b>		
<b>Major Objectives</b>	<b>Strand</b>	<b>Term</b>
<ul style="list-style-type: none"> <li>• Recognize the Family as the basic unit of society.</li> <li>• Explore family roles, functions and characteristics.</li> <li>• Recognize personal , family and societal goals and values</li> <li>• Demonstrate verbal and nonverbal behaviours and attitudes that contribute to effective communication</li> <li>• Determine and manage the role of decision making and problem solving in conflict</li> <li>• Determine individual and family responsibility in relations to environmental trends and issues</li> </ul>	Creativity and Innovation  Explore Methods and procedures  Apply Solution  Career Pathway	3

# GRADE 8

Grade 8 -Term 1		
Resource and Technology- Family and Consumer Management		
Strand	Number of Objectives	Number of “major” objectives
Creativity and Innovation	4	2
Explore methods and procedure	5	4
Apply solution	8	4
Career Pathways	1	-
<b>TOTAL</b>	<b>18</b>	<b>10</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***



<b>RESOURCE AND TECHNOLOGY- GRADE 8 -TERM ONE</b> <b>FAMILY AND CONSUMER MANAGEMENT</b>		
<b>Major Objective</b>	<b>Strand</b>	<b>Term</b>
<ul style="list-style-type: none"> <li>• Describe the functions, sources and deficiency diseases for each micro- nutrient</li> <li>• Define the term food safety</li> <li>• Explain the importance of promoting food safety</li> <li>• Identify the key components of a recipe</li> <li>• Interpret and use a basic recipe</li> <li>• Evaluate a basic recipe for its accuracy</li> <li>• Classify the methods of cooking</li> <li>• Explain the multi-mix principle</li> <li>• Write menus using the multi-mix principle</li> <li>• Describe the factors that should be considered when planning meals for the family</li> </ul>	Creativity and Innovation  Explore Methods and procedures  Apply Solution	1

Grade 8 -Term 2		
Resource and Technology- Family and Consumer Management - Consumer Education		
Strand	Number of Objectives	Number of “major” objectives
Creativity and Innovation	2	2
Explore methods and procedure	3	2
Apply solution	3	3
Career Pathways	2	-
	10	7

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives***

<b>RESOURCE AND TECHNOLOGY- GRADE 8-TERM TWO</b> <b>FAMILY AND CONSUMER MANAGEMENT - CONSUMER EDUCATION</b>		
<b>Major Objectives</b>	<b>Strand</b>	<b>Term</b>
<ul style="list-style-type: none"> <li>• Demonstrates efficient use of management processes.</li> <li>• Formulate solutions that reflect the effective use of time and energy.</li> <li>• Demonstrate appropriate work simplification techniques</li> <li>• Develop realistic budgets</li> <li>• Examine factors that determine consumer wants and needs</li> <li>• Discuss the effects of advertising on the consumer</li> <li>• Identify the principles of effective communication</li> </ul>	Creativity and Innovation  Explore Methods and procedures  Apply Solution	2

Grade 8 -Term 3		
Resource and Technology- Family and Consumer Management - Consumer Education		
Strand	Number of Objectives	Number of “major” objectives
Creativity and Innovation	2	2
Explore methods and procedure	3	2
Apply solution	3	3
Career Pathways	2	-
	10	7

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<b>RESOURCE AND TECHNOLOGY- GRADE 8-TERM THREE</b> <b>FAMILY AND CONSUMER MANAGEMENT - CONSUMER EDUCATION</b>		
<b>Major Objective</b>	<b>Strand</b>	<b>Term</b>
<ul style="list-style-type: none"> <li>• Demonstrates efficient use of management processes.</li> <li>• Formulate solutions that reflect the effective use of time and energy.</li> <li>• Demonstrate appropriate work simplification techniques</li> <li>• Develop realistic budgets</li> <li>• Examine factors that determine consumer wants and needs</li> <li>• Discuss the effects of advertising on the consumer</li> <li>• Identify the principles of effective communication</li> </ul>	Creativity and Innovation  Explore Methods and procedures  Apply Solution	2

# GRADE 9

Grade 9 -Term 1		
Resource and Technology- Family and Consumer Management – Fashion Designing and Merchandizing		
Strand	Number of Objectives	Number of “major” objectives
Creativity and Innovation	2	1
Explore methods and procedure	2	2
Apply solution	3	2
Career Pathways	1	-
<b>TOTAL</b>	<b>8</b>	<b>5</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

<b>RESOURCE AND TECHNOLOGY- GRADE 9- Term One</b> <b>Family and Consumer Management – Fashion Designing and Merchandizing</b>		
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>
<ul style="list-style-type: none"> <li>• Explain the fashion design process/cycle</li> <li>• Explain fashion terms such as fad, fashion, styles, designs and other concepts related to fashion designing</li> <li>• Identify tools and equipment used in fashion designing and pattern drafting</li> <li>• Draw a croquis for flat sketches/designs</li> <li>• Explore sketching techniques to create fashion illustrations</li> </ul>	Creativity and Innovation  Explore Methods and procedures  Apply Solution	1

Grade 9 -Term 2		
Resource and Technology- Family and Consumer Management – Product Development		
Strands	Number of Objectives	Number of “major” objectives
Creativity and Innovation	2	1
Explore methods and procedure	4	2
Apply solution	5	2
Career Pathways	1	1
	12	6

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***



<b>RESOURCE AND TECHNOLOGY- GRADE 9- TERM TWO</b> <b>FAMILY AND CONSUMER MANAGEMENT – PRODUCT DEVELOPMENT</b>		
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>
<ul style="list-style-type: none"> <li>▪ Recognize the variety of fruits and vegetables grown locally and develop a creative and innovative product from local fruits and vegetables</li> <li>▪ Identify the different methods in pastry making.</li> <li>▪ Explore the techniques to be used in the creaming method of cake making.</li> <li>▪ Conduct sensory evaluation for food products.</li> <li>▪ Demonstrate food safety and sanitation procedures</li> <li>▪ Select a career pathway and outline the academic and technical requirements to accessing it.</li> </ul>	Creativity and Innovation  Explore Methods and procedures  Apply Solution	2

Grade 9 -Term 3		
Resource and Technology- Family and Consumer Management – Mini Enterprise		
Strands	Number of Objectives	Number of “major” objectives
Creativity and Innovation	4	2
Explore methods and procedure	4	3
Apply solution	5	3
Career Pathways	4	2
	<b>17</b>	<b>10</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives***

<b>RESOURCE AND TECHNOLOGY- GRADE 9- TERM THREE</b> <b>FAMILY AND CONSUMER MANAGEMENT – MINI ENTERPRISE</b>		
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>
<ul style="list-style-type: none"> <li>• Develop business ideas and establishing a business</li> <li>• Conduct market surveys on specific food /clothing project</li> <li>• Develop business plans</li> <li>• Determine space and type of facility needed for a specific business</li> <li>• Identify expenses related to starting and operating the business</li> <li>• Establish product price</li> <li>• Prepare a market plan</li> <li>• Select advertising media and method of advertising the product</li> <li>• Select business name and develop a business logo</li> <li>• Plan advertising campaign</li> </ul>	<p>Creativity and Innovation</p> <p>Explore Methods and procedures</p> <p>Apply Solution</p> <p>Career Pathway</p>	3

# INDUSTRIAL TECHNIQUES

## GRADE 7

Grade 7 -Term 1		
Subject: Industrial Techniques		
Project Title: Pet Housing and Feeding Unit		
Strand/Theme	Number of Objectives	Number of “major” objectives
Strand 1: Creativity and Innovation	8	8
Strand 2: Exploring Methods and Procedures in solving Problems	23	23
Strand 3: Applying Solutions	21	21
Strand 4: Career Pathways	4	4
<b>Total</b>	<b>56</b>	<b>56</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

<b>INDUSTRIAL TECHNIQUES - GRADE 7- TERM ONE</b> <b>PROJECT TITLE: PET HOUSING AND FEEDING UNIT</b>			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"> <li>Design a solution based on the problem or concept</li> <li>Modify designs if necessary after evaluation exercises</li> <li>Demonstrate freehand sketching principles in the drawing of design solutions</li> <li>Justify the choice of selecting particular resources to be used in the completion of the project</li> </ul>	<p>1</p> <p>1</p> <p>1</p> <p>1</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p>	Teacher has the autonomy to select which module of Resource and Technology will be done in each term.
<ul style="list-style-type: none"> <li>Evaluate designs using the design process</li> <li>Identify available resources and materials to carry out the given tasks</li> <li>Select appropriate resources best suited to complete assigned tasks by conducting basic analyses of their physical/chemical properties.</li> </ul>	<p>3</p> <p>2</p> <p>2</p>	<p>1</p> <p>1</p> <p>1</p>	
<ul style="list-style-type: none"> <li>Select the appropriate hand tools to be employed in the completion of tasks.</li> <li>Apply appropriate safety practices in the execution of the sequence of work</li> <li>Use hand tools and portable power tools safely, accurately and efficiently.</li> </ul>	<p>2</p> <p>2</p> <p>2</p> <p>3</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p>	

Apply appropriate dimensions/measurements for the project solution.	3	1	
<ul style="list-style-type: none"> <li>Assemble components in a logical sequence to complete the project.</li> </ul>	3	1	
<ul style="list-style-type: none"> <li>Conduct online research of similar projects developed to include the outcomes of the development of said projects.</li> </ul>	3	1	
<ul style="list-style-type: none"> <li>Compare finished product with other products with respect to cost, value and quality.</li> </ul>	4	1	
<ul style="list-style-type: none"> <li>Identify career pathway associated with completing this project.</li> </ul>	4	1	
<ul style="list-style-type: none"> <li>Work individually and or in groups to undertake the project or activity.</li> </ul>			

Grade 7 -Term 2		
Subject: Industrial Techniques		
Project : <i>Personal Item Holder Or Container</i>		
Strands/Themes	Number of Objectives	Number of “major” objectives
<b>Strand 1:</b> Creativity and Innovation	3	3
<b>Strand 2:</b> Exploring Methods and Procedures in solving Problems	7	7
<b>Strand 3:</b> Applying Solutions	9	9
<b>Strand 4:</b> Career Pathways	1	1
<b>Total</b>	<b>20</b>	<b>20</b>

*N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.*

<b>INDUSTRIAL TECHNIQUES - GRADE 7- TERM TWO</b> <b>PROJECT TITLE: PERSONAL ITEM HOLDER OR CONTAINER</b>			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"> <li>• Apply appropriate safety practices in the execution of the sequence of work</li> <li>• Identify available resources and materials to carry out the given tasks</li> <li>• Examine the various methods used to safe guard how personal items are secured in the home, school or other live/working environments</li> <li>• Select types of materials best suited for constructing item holders by analysing physical/chemical properties</li> <li>• Outline the methodology to be applied in the execution of the given tasks</li> </ul>	3	2	Teacher has the autonomy to select which module of Resource and Technology will be done in each term.
	2	2	
	2	2	
	3	2	
	1	2	
<ul style="list-style-type: none"> <li>• Select the appropriate tools and equipment to be used to undertake the task</li> <li>• Use hand tools safely and correctly in executing the various processes or operation in completing the project tasks</li> </ul>	3	2	
	3	2	
	2	2	



<b>INDUSTRIAL TECHNIQUES - GRADE 7- TERM TWO</b> <b>PROJECT TITLE: PERSONAL ITEM HOLDER OR CONTAINER</b>			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"> <li>Examine the range of construction processes to be used to accomplish the task</li> <li>Illustrate the process to be employed in the design and construction of the required project</li> <li>Compare various chemical and physical properties of the selected materials used to construct the project.</li> <li>Justify the choice of selected materials based on their properties</li> <li>Identify/list the range of tools that are appropriate for the construction of the given project</li> <li>Create unique design of the personal item holder based on the core principles and elements of design</li> <li>Create two and three dimensional sketches or drawings of the proposed project</li> <li>Identify the design principles to be utilized in order optimize the use of space, form, function and aesthetic value of the holder</li> </ul>	3	2	
	2	2	
	3	2	
	2	2	
	1	2	
	1	2	
	2	2	
	2	2	
	3	2	
	3	3	

<b>INDUSTRIAL TECHNIQUES - GRADE 7- TERM TWO</b> <b>PROJECT TITLE: PERSONAL ITEM HOLDER OR CONTAINER</b>			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"> <li>• Prepare a list of hand tools and machines to be used at each stage of operation in the design and construction of the project</li> <li>• Assemble the components in an effective and efficient manner</li> <li>• Evaluate product against established design criteria</li> <li>• Identify career pathway associated with completing this project.</li> <li>• Work individually and or in groups to undertake the project or activity</li> </ul>	4	2	
	3	2	

Grade 7 -Term 3		
Subject: Industrial Techniques		
Project Title: Simple Series Parallel Circuit		
Strands/Themes	Number of Objectives	Number of “major“ objectives
<b>Strand 1:</b> Creativity and Innovation	1	1
<b>Strand 2:</b> Exploring Methods and Procedures in solving Problems	11	11
<b>Strand 3:</b> Applying Solutions	7	7
<b>Strand 4:</b> Career Pathways	1	1
<b>Total</b>	<b>16</b>	<b>16</b>

*N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major object*

<b>INDUSTRIAL TECHNIQUES - GRADE 7- TERM THREE</b> <b>PROJECT TITLE- SIMPLE SERIES PARALLEL CIRCUIT</b>			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"> <li>Define the term circuit</li> <li>Identify the types of circuits</li> <li>List the basic components of the circuit</li> <li>State the properties of energy</li> <li>Name types of energy sources</li> <li>Draw simple diagrams to illustrate the layout of the circuits</li> <li>Differentiate between an open circuit and a closed circuit</li> <li>Use basic hand tools to construct circuits</li> </ul>	2 2 2 2 2 1  2  3	3 3 3 3 3 3  3  3	Teacher has the autonomy to select which module of Resource and Technology will be done in each term.
<ul style="list-style-type: none"> <li>Select the appropriate tools to make the circuit</li> <li>Identify instrument(s) to test electrical quantities in any given circuit</li> <li>Identify the most appropriate materials to construct the circuit</li> <li>Compare materials used as conductor and insulator</li> <li>Calculate the quantity of materials required for construct the circuit</li> <li>Manipulate tools to cut, connect and terminate electrical components</li> </ul>	3 2 2 2 2 3	3 3 3 3 3 3	

<ul style="list-style-type: none"> <li>• Demonstrate appropriate safety precautions associated with the construction of circuits</li> <li>• Conduct testing of electrical quantities at different points in the circuit</li> </ul>	3	3	
<ul style="list-style-type: none"> <li>• Critique the assembly of circuits for neatness, accuracy and functionality using a prescribed checklist.</li> <li>• Explain how electrical energy is generated and distributed to end user</li> <li>• Identify career pathway associated with completing this project.</li> <li>• Work individually or in groups to undertake the project or activity.</li> </ul>	3	3	
	2	3	
	4	3	
	3	3	

# GRADE 8

Grade 8 -Term 1		
Subject: Industrial Techniques		
Project : The Inbox /Outbox Unit		
<b>Strands/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
<b>Strand 1:</b> Creativity and Innovation	-	-
<b>Strand 2:</b> Exploring Methods and Procedures in solving Problems	2	2
<b>Strand 3:</b> Applying Solutions	6	6
<b>Strand 4:</b> Career Pathways	2	2
<b>Total</b>	<b>10</b>	<b>10</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

INDUSTRIAL TECHNIQUES - GRADE 8-TERM ONE			
PROJECT: THE INBOX /OUTBOX UNIT			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"> <li>Demonstrate competence in the appropriate use of tools and equipment.</li> <li>Select appropriate portable power tools that may be employed in the completion of the task. Use tools and equipment safely and follow all necessary personal and general safety guidelines.</li> <li>Apply appropriate dimensions/measurements for the project solution.</li> <li>Examine the range of fasteners and fittings that are applicable to the completion of the project. Identify the appropriate accessories that re applicable to the development of the project.</li> </ul>	3	1	Teacher has the autonomy to select which module of Resource and Technology will be done in each term.
	2	1	
	3	1	
	2	1	
<ul style="list-style-type: none"> <li>Assemble components in a logical sequence to complete the project.</li> <li>Use appropriate communication and information technologies to</li> <li>Compare illustrate design and construction processes.</li> <li>A finished product with other products to determining the cost, value and quality.</li> </ul>	3	1	
	3	1	
	3	1	
	3	1	

<b>INDUSTRIAL TECHNIQUES - GRADE 8-TERM ONE</b> <b>PROJECT: THE INBOX /OUTBOX UNIT</b>			
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>	
<ul style="list-style-type: none"> <li>Identify current technological applications/trends in society</li> </ul>	4	1	
<ul style="list-style-type: none"> <li>Identify career pathway associated with completing this project.</li> </ul>			
<ul style="list-style-type: none"> <li>Work individually or in groups to undertake the project or activity.</li> </ul>	4	1	



Grade 8 -Term 2		
Subject: Industrial Techniques		
Project: Animated Toy		
<b>Strands</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
<b>Strand 1:</b> Creativity and Innovation	2	2
<b>Strand 2:</b> Exploring Methods and Procedures in solving Problems	15	15
<b>Strand 3:</b> Applying Solutions	8	8
<b>Strand 4:</b> Career Pathways	1	1
<b>Total</b>	<b>26</b>	<b>26</b>

*N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major object*

INDUSTRIAL TECHNIQUES - GRADE 8-TERM TWO			
PROJECT TITLE: ANIMATED TOY			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"> <li>• Apply appropriate safety procedures in the execution of the sequence of work</li> <li>• Define the terms 'energy' and 'work'</li> <li>• Explain the relation between energy and work</li> <li>• Identify forms of energy used for everyday solutions</li> <li>• Classify the forms of energy according to their sources</li> <li>• Explain how energy can be converted from one form to another</li> <li>• Explain how the different sources of energy can be utilized to support human development</li> <li>• Assess how the application of work/force can be optimized in order to operation/function the project</li> <li>• Identify types of simple machines</li> <li>• Examine how the principles of simple machines can be combined to produce motion of simple mechanism</li> <li>• Compare the operations of simple machines using the correct technical terminology</li> </ul>	<p>3</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p>	<p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p>	<p>Teacher has the autonomy to select which module of Resource and Technology will be done in each term.</p>

<ul style="list-style-type: none"> <li>• Animate a selected part of the project using the cam principle or any other simple machine principle</li> </ul>	3	2	
<ul style="list-style-type: none"> <li>• Design a toy using given parameters/guidelines</li> </ul>	1	2	
<ul style="list-style-type: none"> <li>• Apply appropriate safety practices/precautions in the execution of a sequence of tasks</li> </ul>	3	2	
<ul style="list-style-type: none"> <li>• Use context to select the most appropriate material(s) to make the various parts of the project</li> </ul>	2	2	
<ul style="list-style-type: none"> <li>• Organize a list of hand/portable tools to be used at each stage of the project</li> </ul>	2	2	
<ul style="list-style-type: none"> <li>• Create/interpret a set of working drawings to guide the process of completing the project in a specified time</li> </ul>	2	2	
<ul style="list-style-type: none"> <li>• Create a three dimensional representation of at least one part/component of the project using an accessible software</li> </ul>	1	2	
<ul style="list-style-type: none"> <li>• Outline the steps to a functional project (toy)</li> </ul>	2	2	
<ul style="list-style-type: none"> <li>• Use a range of hand tools correctly in executing each process or operation associated with the construction of the project</li> </ul>	3	2	
<ul style="list-style-type: none"> <li>• Explain the engineering processes associated with Formulate an appropriate assessment system/method to check for correctness and suitability of each</li> </ul>	2	2	

part or component of the project prior to final assemble	3	2	
<ul style="list-style-type: none"> <li>Assemble the various parts/components of the project using the most suitable fasteners and or adhesives</li> </ul>	3	2	
<ul style="list-style-type: none"> <li>Select and use the most appropriate finishing techniques for the product's end use</li> </ul>	3	2	
<ul style="list-style-type: none"> <li>Critique the final project for neatness, functionality and aesthetics appeal</li> </ul>	4	2	
<ul style="list-style-type: none"> <li>Identify career pathway associated with completing this project.</li> </ul>	3	2	
<ul style="list-style-type: none"> <li>Work individually or in groups to undertake the project or activity.</li> </ul>			

Grade 8 -Term 3		
Subject: Industrial Techniques		
Project: Waste Management Programme		
<i>Strand</i>	<i>Number of Objectives</i>	<i>Number of “major” objectives</i>
<b>Strand 1:</b> Creativity and Innovation	3	3
<b>Strand 2:</b> Exploring Methods and Procedures in solving Problems	12	12
<b>Strand 3:</b> Applying Solutions	4	4
<b>Strand 4:</b> Career Pathways	1	1
<b>Total</b>	<b>20</b>	<b>20</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

INDUSTRIAL TECHNIQUES - GRADE 8-TERM THREE			
PROJECT: WASTE MANAGEMENT PROGRAMME			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"><li>• Classify waste according to toxicity and renewability</li></ul>	2	3	Teacher has the autonomy to select which module of Resource and Technology will be done in each term.
<ul style="list-style-type: none"><li>• Examine the effects of improper waste management in the environment.</li></ul>	2	3	
<ul style="list-style-type: none"><li>• Design guidelines for the execution of the project/programme under taken</li></ul>	2	3	
<ul style="list-style-type: none"><li>• Formulate strategies for the sensitization of persons about personal and environmental safety</li></ul>	2	3	
<ul style="list-style-type: none"><li>• Identify biodegradable waste commonly used in the work environment</li></ul>	2	3	
	2	3	
<ul style="list-style-type: none"><li>• Outline applications for reusable waste from common resource</li></ul>	1	3	
<ul style="list-style-type: none"><li>• Design systems for the recycling of common resources</li></ul>	1	3	
<ul style="list-style-type: none"><li>• Design storage systems for resources and various waste materials</li></ul>	3	3	
<ul style="list-style-type: none"><li>• Construct practical items from waste material</li></ul>	2	3	
<ul style="list-style-type: none"><li>• Explore and adopt alternative methods of using waste materials within the environment</li></ul>			

<b>INDUSTRIAL TECHNIQUES - GRADE 8-TERM THREE</b> <b>PROJECT: WASTE MANAGEMENT PROGRAMME</b>			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"> <li>Assess the feasibility of reusing waste material as opposed to discarding it</li> </ul>	2	3	
<ul style="list-style-type: none"> <li>Design systems/programmes for the management of resources within the environment</li> </ul>	1	3	
<ul style="list-style-type: none"> <li>Appraise the safety concerns with regards to recycling and waste disposal</li> </ul>	2	3	
<ul style="list-style-type: none"> <li>Employ the use of technology to aid in the recycling and disposal of waste materials</li> </ul>	3	3	
<ul style="list-style-type: none"> <li>Estimate cost of material from design specifications</li> </ul>	2	3	
<ul style="list-style-type: none"> <li>Perform basic calculations/computations of quantities of resource material needed in the execution of the system/programme</li> </ul>	3	3	
<ul style="list-style-type: none"> <li>Rate the finished product with respect to quality and cost</li> </ul>	2	3	
<ul style="list-style-type: none"> <li>Apply on-going quality control evaluation strategies to the project</li> </ul>	4	3	
<ul style="list-style-type: none"> <li>Practice acceptable time and resource management strategies</li> </ul>			
<ul style="list-style-type: none"> <li>Identify career pathway associated with completing this project</li> </ul>			

# GRADE 9

Grade 9 -Term 1		
Subject: Industrial Techniques		
Project: Kitchen Utensils/Accessories		
Strands	Number of Objectives	Number of “major” objectives
<b>Strand 1:</b> Creativity and Innovation	5	5
<b>Strand 2:</b> Exploring Methods and Procedures in solving Problems	5	5
<b>Strand 3:</b> Applying Solutions	16	16
<b>Strand 4:</b> Career Pathways	1	1
<b>Total</b>	<b>27</b>	<b>27</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***



INDUSTRIAL TECHNIQUES - GRADE 9-TERM ONE			
PROJECT: KITCHEN UTENSILS/ACCESSORIES			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"> <li>Use brainstorming and/or concept mapping to design a solution based on the problem or concept</li> <li>Research product ideas and present findings in project/presentation formats</li> <li>Evaluate designs using the design process</li> <li>Modify designs if necessary after evaluation exercises</li> <li>Demonstrate freehand sketching principles in the drawing of design solutions</li> <li>Accurately use Technical Drawing principles to draw angles, quadrilaterals, circles and arcs, polygons and other plane figures</li> <li>Create two dimensional sketches or drawings of the proposed project Using traditional drawing techniques. Using Simple CAD Applications</li> </ul>	2	1	Teacher has the autonomy to select which module of Resource and Technology will be done in each term.
	2	1	
	2	1	
	1	1	
	1	1	
	1	1	
	1	1	
<ul style="list-style-type: none"> <li>Accurately use the principles of Isometrics, oblique and/or perspective drawing to produce three dimensional sketches or drawings</li> </ul>	1	1	

INDUSTRIAL TECHNIQUES - GRADE 9-TERM ONE			
PROJECT: KITCHEN UTENSILS/ACCESSORIES			
Major Objectives	Strands	Term	
of the proposed project 1. Using traditional drawing techniques 2. Using Simple CAD Applications			
• Identify available resources and materials to carry out the given tasks	2	1	
	2	1	
• Select appropriate resources best suited to complete assigned tasks by analysing physical and chemical properties Differentiate appropriate resources with consideration to project needs/problem.	3	1	
• Examine the range of construction processes to be used to accomplish the task	3	1	
• Demonstrate competence in the care and maintenance of hand tools and powered equipment.	3	1	
• Select appropriate portable power tools or stationary equipment to be employed in the completion of the task.	3	1	
	3	1	
• Select the appropriate hand tools to be employed in the completion of tasks.	3	1	
	3	1	

<b>INDUSTRIAL TECHNIQUES - GRADE 9-TERM ONE</b> <b>PROJECT: KITCHEN UTENSILS/ACCESSORIES</b>			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"> <li>• Apply appropriate safety practices in the execution of the sequence of work</li> <li>• Use hand tools and portable power tools safely, accurately and efficiently.</li> <li>• Calculate accurately the amount of material that is needed to complete the project.</li> <li>• Apply appropriate dimensions/measurements for the project solution.</li> <li>• Assemble components in a logical sequence to complete the project.</li> <li>• Use appropriate information and communication technologies (ITC's) to illustrate design and construction processes. Estimate accurately the cost required to complete project.</li> <li>• Compare finished product with other products with respect to cost, value and quality.</li> <li>• Justify the choice of materials and resources with due diligence for the environment.</li> </ul>	3	1	
	3	1	
	3	1	
	3	1	
	3	1	
	3	1	
	3	1	
	4	1	
	3	1	

<b>INDUSTRIAL TECHNIQUES - GRADE 9-TERM ONE</b> <b>PROJECT: KITCHEN UTENSILS/ACCESSORIES</b>			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"> <li>• Connect technological applications in society to the design and construction of the tasks</li> <li>• Evaluate product against established design criteria</li> <li>• Identify career pathway associated with completing this project.</li> <li>• Work individually and or in groups to undertake the project or activity.</li> </ul>			

Grade 9 -Term 2		
Subject: Industrial Techniques		
Project: Storage Device or Space Organizer		
Strands	Number of Objectives	Number of “major” objectives
<b>Strand 1:</b> Creativity and Innovation	7	7
<b>Strand 2:</b> Exploring Methods and Procedures in solving Problems	9	9
<b>Strand 3:</b> Applying Solutions	7	7
<b>Strand 4:</b> Career Pathways	1	1
<b>Total</b>	<b>24</b>	<b>24</b>

<b>INDUSTRIAL TECHNIQUES - GRADE 9-TERM TWO</b> <b>PROJECT: STORAGE DEVICE OR SPACE ORGANIZER</b>			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"> <li>Design a solution based on the problem or concept</li> <li>Use tools, materials and machines safely and accurately</li> <li>Name the related tools and machines associated with the project to be produced</li> <li>Predict the number of projects to be produced from a given quantity of materials</li> <li>Draw two/three dimensional drawings of the proposed projects to an appropriate scale</li> <li>Produce two/three dimensional designs using available software</li> <li>Use basic CAD applications to produce drawings</li> <li>Create a series of presentation drawings of the proposed project</li> <li>Outline the steps required to complete a specific processes (for e.g. cutting or at a particular degree) or the project</li> <li>Construct orthographic views of simple objects</li> </ul>	1  3  2  2  1  1  1  2  1	2  2  2  2  2  2  2  2	Teacher has the autonomy to select which module of Resource and Technology will be done in each term.

<b>INDUSTRIAL TECHNIQUES - GRADE 9-TERM TWO</b> <b>PROJECT: STORAGE DEVICE OR SPACE ORGANIZER</b>			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"> <li>Produce a budget schedule for an estimated target</li> </ul>	2	2	
<ul style="list-style-type: none"> <li>Prepare working drawings from pictorial views</li> </ul>	1	2	
<ul style="list-style-type: none"> <li>Identify available and/or smart resources needed to complete assigned tasks.</li> </ul>	2	2	
<ul style="list-style-type: none"> <li>Select available and/or smart resources needed to complete assigned tasks.</li> </ul>	2	2	
<ul style="list-style-type: none"> <li>Select the most appropriate resources with consideration to project needs/problem and environmental considerations.</li> </ul>	2	2	
<ul style="list-style-type: none"> <li>Calculate the total cost of materials used to complete a given task/ project</li> </ul>	3	2	
<ul style="list-style-type: none"> <li>Demonstrate a range of operation processes to complete tasks (for cutting, layout, assembling, finishing, soldering)</li> </ul>	2	2	
<ul style="list-style-type: none"> <li>Differentiate between the terms 'unit production' and 'mass production'</li> </ul>	3	2	
<ul style="list-style-type: none"> <li>Apply appropriate finishes to a range of materials and components</li> </ul>	3	2	
<ul style="list-style-type: none"> <li>Assemble components in a logical sequence to complete the project.</li> </ul>	3	2	

<b>INDUSTRIAL TECHNIQUES - GRADE 9-TERM TWO</b> <b>PROJECT: STORAGE DEVICE OR SPACE ORGANIZER</b>			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"> <li>• Apply appropriate dimensions/measurements for the project solution</li> <li>• Justify the choice of materials and other resources with due considerations for the environment</li> <li>• Demonstrate an awareness of possible careers associated completing the project.</li> <li>• Work individually and or in groups to undertake the project or activity.</li> </ul>	4	2	
	3	2	



Grade 9 -Term 3		
Subject: Industrial Techniques		
Project: Personalized Concept Clocks		
Strand	Number of Objectives	Number of “major” objectives
<b>Strand 1:</b> Creativity and Innovation	3	3
<b>Strand 2:</b> Exploring Methods and Procedures in solving Problems	10	10
<b>Strand 3:</b> Applying Solutions	5	5
<b>Strand 4:</b> Career Pathways	-	-
<b>Total</b>	<b>18</b>	<b>18</b>

*N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major object*

INDUSTRIAL TECHNIQUES - GRADE 9-TERM THREE			
PROJECT: PERSONALIZED CONCEPT CLOCKS			
Major Objectives	Strands	Term	
<ul style="list-style-type: none"> <li>Explain the principle of current flow</li> <li>Use the elements of design to produce/make 3D object</li> <li>Use prescribe scales to reduce and enlarge an image or object</li> <li>Interpret diagrammatic information on working drawing</li> <li>Demonstrate the accurate using of manual and CAD enabled tools to produce various drawings</li> <li>Define the term production</li> <li>Outline the tenets/features of a business plan</li> <li>Define the term marketing</li> <li>Identify production techniques used in the manufacturing process</li> <li>Model the roles of operatives in a business</li> <li>Connect accurately to components of a series to produce a desire outcome</li> <li>Apply the standard principles of electricity to compute various electrical values                             <ol style="list-style-type: none"> <li>Calculate accurately the total voltage in a circuit</li> <li>Calculate accurately the power in a circuit</li> <li>Calculate</li> </ol> </li> </ul>	<p>2</p> <p>1</p> <p>1</p> <p>2</p> <p>1</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>3</p> <p>3</p> <p>2</p>	<p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p>	<p>Teacher has the autonomy to select which module of Resource and Technology will be done in each term.</p>

<b>INDUSTRIAL TECHNIQUES - GRADE 9-TERM THREE</b> <b>PROJECT: PERSONALIZED CONCEPT CLOCKS</b>			
Major Objectives	Strands	Term	
accurately the total resistance in a circuit 4. Calculate accurately the total current in a circuit	3	3	
<ul style="list-style-type: none"> <li>Explain appropriate/accurate terminologies relating to electrical measurements and quantities</li> </ul>	3	3	
<ul style="list-style-type: none"> <li>Use electrical tools and measuring instruments safely</li> </ul>			
<ul style="list-style-type: none"> <li>Use drawing tools appropriately and safely Justify/assess the operating principles of a simple circuit solution</li> </ul>	3	3	
<ul style="list-style-type: none"> <li>Distinguish/differentiate between the components in a simple circuit</li> </ul>	2	3	
<ul style="list-style-type: none"> <li>Identify the main characteristics/considerations used to determine the most suitable finishing material</li> </ul>	2	3	
<ul style="list-style-type: none"> <li>Explain how energy/motion can be transferred/manipulate using different types of mechanical mechanisms</li> </ul>			

# BUSINESS BASICS

## GRADE 7

Grade 7—Resource & Technology – Business Basics-Term 1-Unit 1 Inventions in Resources & Technology used in Business Environment		
Strands	Number of Objectives	Number of “major” objectives
Creativity & Innovation	7	7
Exploring Methods & Procedures	2	2
Apply Solution	5	5
<b>Total</b>	<b>14</b>	<b>14</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

<b>RESOURCE &amp; TECHNOLOGY – BUSINESS BASICS- GRADE 7-TERM ONE-UNIT 1</b> <b>INVENTIONS IN RESOURCES &amp; TECHNOLOGY USED IN BUSINESS ENVIRONMENT</b>			
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>• Identify resources and technology that have been invented and utilized in business environment.</li> <li>• Define terms resources, technology, skills, attitude, human resources, nonhuman resources, simple resource, traditional resource, advanced resource, invention</li> <li>• Discuss advancements made to resources and technology in the business environment which have contributed to efficiency and productivity.</li> <li>• Differentiate between simple and advanced resource and technology.</li> <li>• Identify new skills, knowledge and attitudes that are associated with the introduction of modern resources and technology in the business environment.</li> <li>• Discuss the relationship between resource and technology</li> <li>• Explain how resources and technology are used to produce goods and services</li> </ul>	Creativity & Innovation	1	1
<ul style="list-style-type: none"> <li>• Categorize resources utilized in business (human, non-human)</li> <li>• Explain the scientific process of how machines work</li> </ul>	Exploring Methods & Procedures	1	1
<ul style="list-style-type: none"> <li>• Create a timeline to show the development of office equipment and tools.</li> <li>• Demonstrate the safe use of simple and advance office equipment and tools.</li> <li>• Evaluate the product to determine its ability to enhance</li> </ul>	Apply Solution	1	1

<b>RESOURCE &amp; TECHNOLOGY – BUSINESS BASICS- GRADE 7-TERM ONE-UNIT 1</b> <b>INVENTIONS IN RESOURCES &amp; TECHNOLOGY USED IN BUSINESS ENVIRONMENT</b>			
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>	<b>Unit</b>
<p>efficiency and productivity.</p> <ul style="list-style-type: none"> <li>• Create a new product or redesign an existing equipment or tool to enhance efficiency in a business activity.</li> <li>• Make presentation on model created</li> </ul>			

<b>Grade 7—Resource &amp; Technology – Business Basics-Term 1-Unit 2 Safety and Hygiene in the Business Environment</b>		
<b>Strands</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
Creativity & Innovation	8	8
Exploring Methods & Procedures	1	1
Apply Solution	1	1
<b>Total</b>	<b>10</b>	<b>10</b>

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<b>RESOURCE &amp; TECHNOLOGY – BUSINESS BASICS- GRADE 7-TERM ONE-UNIT 2</b> <b>SAFETY AND HYGIENE IN THE BUSINESS ENVIRONMENT</b>			
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>• Define the following key terms: safe, healthy, hygiene, hazards, danger, threat</li> <li>• Identify unsafe and unhealthy workplace practices</li> <li>• Identify the features of a safe and hygienic working environment</li> <li>• State the benefits of maintaining safe and hygienic practices in a business environment</li> <li>• Discuss the risks associated with an unsafe and unhygienic business environment</li> <li>• Explain the term ‘personal hygiene’</li> <li>• Discuss the importance of maintaining personal hygiene in the business environment</li> <li>• Discuss the effects of natural and environmental factors on the business environment</li> </ul>	Creativity & Innovation:	1	2
<ul style="list-style-type: none"> <li>• Suggest strategies for maintaining personal hygiene in the business environment</li> </ul>	Exploring Methods & Procedures	1	2
<ul style="list-style-type: none"> <li>• Design safety symbols/signs appropriate for the business environment using various geometrical shapes</li> </ul>	Apply Solution	1	2



Grade 7—Resource & Technology – Business Basics-Term 2-Unit 1 Safety Management in the Business Environment		
Strands	Number of Objectives	Number of “major” objectives
Creativity & Innovation	5	5
Exploring Methods & Procedures	3	3
Apply Solution	2	2
<b>Total</b>	<b>10</b>	<b>10</b>

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<b>RESOURCE &amp; TECHNOLOGY – BUSINESS BASICS- GRADE 7-TERM TWO-UNIT 1</b> <b>SAFETY MANAGEMENT IN THE BUSINESS ENVIRONMENT</b>			
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>• Define the term Safety Management and Occupational Health and Safety (OHS) and risk assessment</li> <li>• Discuss reasons why businesses adopt a Safety Management System</li> <li>• Identify different types of Safety Management strategies</li> <li>• Discuss the role of personnel and agencies to ensure safety in the business environment</li> <li>• Identify careers that are associated with safety management in the business environment</li> </ul>	Creativity & Innovation:	1	1
<ul style="list-style-type: none"> <li>• Identify designated personnel responsible managing health and safety issues in the workplace</li> <li>• Develop documents to be used to manage safety in a business</li> <li>• Outline the procedure for handling injury/damage in the workplace</li> </ul>	Exploring Methods & Procedures	1	1
<ul style="list-style-type: none"> <li>• Calculate distance using millimeters, centimeters, decimeters, and meters of safety zones in a laboratory</li> <li>• Design a health and safety management policy for a school</li> </ul>	Apply Solution	1	1

<b>Grade 7—Resource &amp; Technology – Business Basics -Term 2 -Unit 2</b> <b>Utilizing Resources &amp; Technology To Create Products</b>		
<b>Strand/Themes</b>	<b>Number of Objectives</b>	<b>Number of “major” objectives</b>
Creativity & Innovation	5	5
Exploring Methods & Procedures	3	3
Apply Solution	3	3
Career Pathway	1	1
<b>Total</b>	<b>12</b>	<b>12</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

<b>RESOURCE &amp; TECHNOLOGY – BUSINESS BASICS-GRADE 7-TERM TWO-UNIT 2</b> <b>UTILIZING RESOURCES &amp; TECHNOLOGY TO CREATE PRODUCTS</b>			
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>• Define term stationery.</li> <li>• Identify various stationery used in business offices</li> <li>• Differentiate among paper types and sizes and their uses in the business office.</li> <li>• Differentiate among the types and sizes of envelopes and their purposes.</li> <li>• Select appropriate types and sizes of stationery for a variety of business uses.</li> <li>•</li> </ul>	Creativity & Innovation:	2	2
<ul style="list-style-type: none"> <li>• Explain the process of how paper is made.</li> <li>• Sub-divide paper to illustrate various paper sizes as a fraction or percentage of its original using ISO “A” series (A4, A5, A6 etc.)</li> <li>• Select appropriate types and sizes of stationery for a variety of business uses</li> </ul>	Exploring Methods & Procedures	2	2
<ul style="list-style-type: none"> <li>• Convert paper and envelope measurements from inches to millimeter and centimeter (imperial to metric).</li> <li>• Utilize various stationery to create business documents</li> <li>• Practice safety procedures when using office stationery and supplies.</li> </ul>	Apply Solution	2	2
<ul style="list-style-type: none"> <li>• Identify careers associated with business offices</li> </ul>	Career Pathway	2	2

Grade 7—Resource & Technology – Business Basics – Term 3 Unit 1		
Resources Used in Production		
Strands	Number of Objectives	Number of “major” objectives
Creativity & Innovation	7	7
Exploring Methods & Procedures	4	4
Apply Solution	1	1
<b>Total</b>	<b>12</b>	<b>12</b>

***N.B. Major objectives can be defined as those objectives that students must achieve in order to access the content at the next grade level. Some of the pre-requisite knowledge outlined in the next grade-level can help in identifying the major objectives.***

<b>RESOURCE &amp; TECHNOLOGY-BUSINESS BASICS – GRADE 7-TERM THREE-UNIT 1</b> <b>RESOURCES USED IN PRODUCTION</b>			
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>Define key terms production, factors of production, natural resources (land), human resources (labour), capital resources, enterprise, goods and services.</li> <li>Identify the factors of production</li> <li>Explain the importance of each factor of production.</li> <li>Discuss how the factors of production are utilized in the creation of goods and services.</li> <li>Explain each category of workers as unskilled, semi-skilled, skilled or professional</li> <li>Identify natural resources and their related industries found in their immediate and wider communities.</li> <li>Differentiate between renewable and non-renewable resources used in production.</li> </ul>	Creativity & Innovation:	3	1
<ul style="list-style-type: none"> <li>Classify items as renewable or non-renewable resources.</li> <li>Convert time for depletion of energy to years, decades and century</li> <li>Organize the appropriate factors of production for economic activities</li> <li>Explore the skills, attitudes and values required for selected economic activities.</li> </ul>	Exploring Methods & Procedures	3	1
<ul style="list-style-type: none"> <li>Create a business model for a product and apply the factors of production to the creation of a product.</li> </ul>	Apply Solution	3	1

Grade 7—Resource & Technology – Business Basics Term 3 Unit 2 Protection & Conservation of Resources in the Environment		
Strands	Number of Objectives	Number of “major” objectives
Creativity & Innovation	6	6
Exploring Methods & Procedures	3	3
Apply Solution	2	2
<b>Total</b>	<b>11</b>	<b>11</b>

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<b>RESOURCE &amp; TECHNOLOGY – BUSINESS BASICS – GRADE 7-TERM THREE-UNIT 2</b> <b>PROTECTION &amp; CONSERVATION OF RESOURCES IN THE ENVIRONMENT</b>			
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>Define the terms: conservation, protection, ergonomics, layout, discarded, recycle/reuse,</li> <li>Outline the standards for creating an ergonomically friendly office environment</li> <li>Explain the advantages and disadvantages of establishing an ergonomically friendly environment</li> <li>Discuss activities carried out in the office that affect the environment</li> <li>Discuss conservation methods used by businesses</li> <li>Discuss the benefits of recycling</li> </ul>	Creativity & Innovation:	3	2
<ul style="list-style-type: none"> <li>Identify appropriate furniture and equipment to ensure health, safety and increased productivity</li> <li>Select appropriate furniture and equipment for an ergonomically friendly business office</li> <li>Identify reusable materials that can be converted into efficient used in an office</li> </ul>	Exploring Methods & Procedures	3	2
<ul style="list-style-type: none"> <li>Design a model of a computer workstation</li> <li>Create recycled items for use in the business office</li> </ul>	Apply Solution	3	2



# GRADE 8

Grade 8—Resources & Technology – Business Basics – Term One- Unit 1		
Exploring Resources		
Strands	Number of Objectives	Number of “major” objectives
Creativity & Innovation	5	5
Exploring Methods & Procedures	2	2
Apply Solution	2	2
Career Pathway	2	2
<b>Total</b>	<b>11</b>	<b>11</b>

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<b>RESOURCE &amp; TECHNOLOGY – BUSINESS BASICS – GRADE 8-TERM ONE-UNIT 1</b> <b>EXPLORING RESOURCES</b>			
Major Objectives	Strand	Term	Unit
<ul style="list-style-type: none"> <li>Define the terms, production, primary/extractive, secondary/construction, tertiary/services, traditional/subsistence-level, domestic/local, surplus/export and Linkages</li> <li>Distinguish among types of production.</li> <li>Discuss the importance of each type of production to the Jamaican economy</li> <li>Identify the levels of production.</li> <li>Differentiate among levels of production.</li> </ul>	Creativity & Innovation:	1	1
<ul style="list-style-type: none"> <li>Classify the process used to convert a selected raw material from its primary source to secondary source of production.</li> <li>Classify given products according to its industry.</li> </ul>	Exploring Methods & Procedures	1	1
<ul style="list-style-type: none"> <li>Design flow chart using geometrical shape to depict the production process of a product.</li> <li>Evaluate the role of each level of production to economic development.</li> </ul>	Apply Solution	1	1
<ul style="list-style-type: none"> <li>Classify careers within the different types of production.</li> <li>Evaluate given career options by assessing traditional careers versus emerging careers.</li> </ul>	Career Pathway	1	1

Grade 8—Resources & Technology – Business Basics-Term One-Unit 2		
Efficiency in Production		
Strands	Number of Objectives	Number of “major” objectives
Creativity & Innovation	7	7
Exploring Methods & Procedures	2	2
Apply Solution	1	1
Career Pathway	1	1
<b>Total</b>	<b>11</b>	<b>11</b>

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<b>RESOURCE &amp; TECHNOLOGY – BUSINESS BASICS – GRADE 8-TERM ONE-UNIT 2</b> <b>EFFICIENCY IN PRODUCTION</b>			
Major Objectives	Strand	Term	Unit
<ul style="list-style-type: none"> <li>• Define the terms: labour intensive, capital intensive, mechanization, automation, productivity, efficiency</li> <li>• Explain the methods of production</li> <li>• Discuss the safe use of machine used in the production of a selected good or service</li> <li>• Identify industries which utilize the various methods of production</li> <li>• Identify types of automated systems used in the business environment</li> <li>• Discuss the advantages and disadvantages of each method of production</li> <li>• Discuss the economic, social and environmental impact of the various methods of production</li> </ul>	Creativity & Innovation:	1	2
<ul style="list-style-type: none"> <li>• Analyse how the various methods of production contribute to productivity in a business.</li> <li>• Differentiate between labour intensive and capital intensive production</li> </ul>	Exploring Methods & Procedures	1	2
<ul style="list-style-type: none"> <li>• Create a timeline to show the evolution of productive activities from labour intensive to capital intensive production</li> </ul>	Apply Solution	1	2
<ul style="list-style-type: none"> <li>• Identify new and emerging careers associated with the use of ICT in manufacturing and trade.</li> </ul>	Career Pathway	1	2

Grade 8—Resources & Technology – Business Basics – Term Two- Unit 1		
Communication in Business		
Strands	Number of Objectives	Number of “major” objectives
Creativity & Innovation	6	6
Exploring Methods & Procedures	3	3
Apply Solution	2	2
Career Pathway	1	1
<b>Total</b>	<b>12</b>	<b>12</b>

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<b>RESOURCE &amp; TECHNOLOGY – BUSINESS BASICS – GRADE 8-TERM TWO-UNIT 1</b> <b>COMMUNICATION IN BUSINESS</b>			
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>	<b>Unit</b>
Define the term communication • Explain the element of the communication process • Explain the elements of good communication • Identify the methods of communication • Discuss the barriers to good communication • Explain the elements of various documents used to communicate appropriate computer software/writing tools	Creativity & Innovation:	2	1
• Select the appropriate methods of communication and express reasons for selection • Prepare simple charts and graphs in response to a given scenario using • Discuss safety consideration when using communication media in a business	Exploring Methods & Procedures	2	1
• Compose business correspondence to respond to a given scenario • Design business correspondence using the appropriate layout/format	Apply Solution	2	1
• Identify careers associated with using communication media in a business	Career Pathway	1	1

Grade 8—Resources & Technology – Business Basics-Term Two-Unit 2 Banking Services		
Strands	Number of Objectives	Number of “major” objectives
Creativity & Innovation	6	6
Exploring Methods & Procedures	2	2
Apply Solution	2	2
Career Pathway	1	1
<b>Total</b>	<b>11</b>	<b>11</b>

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RESOURCE & TECHNOLOGY – BUSINESS BASICS GRADE 8-TERM TWO - UNIT 2			
BANKING SERVICES			
Major Objectives	Strands	Term	Unit
<ul style="list-style-type: none"> <li>Identify forms of money used to acquire goods and services.</li> <li>Define the terms: commercial banks, bank deposits, cheques cash, notes, withdrawal, deposits, lodgement, currency memorandum, automatic banking, Personal Identification Number (PIN), debit card and credit cards</li> <li>Identify services provided by banks to businesses</li> <li>Discuss the advantages of using cheques in business transactions.</li> <li>Explain the parts of a cheque</li> <li>Discuss the benefits of an Automated Teller Machine/online banking to a business</li> </ul>	Creativity & Innovation:	2	2
<ul style="list-style-type: none"> <li>Discuss the safety guidelines for drawing cheques</li> <li>Explain the procedures for using an Automated Teller Machine (ATM)/ online banking</li> </ul>	Exploring Methods & Procedures	2	2
<ul style="list-style-type: none"> <li>Fill in appropriate information in a blank cheque from given scenario</li> <li>Complete relevant forms to access banking services</li> </ul>	Apply Solution	2	2
<ul style="list-style-type: none"> <li>Identify new and emerging careers associated with Banking Sector.</li> </ul>	Career Pathway	2	2



Grade 8—Resources & Technology – Business Basics – Term 3 Unit 1 Introduction to Basic Accounting Terms		
Strands	Number of Objectives	Number of “major” objectives
Creativity & Innovation	6	6
Exploring Methods & Procedures	2	2
Apply Solution	3	3
Career Pathway	1	1
<b>Total</b>	<b>12</b>	<b>12</b>

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<b>RESOURCE &amp; TECHNOLOGY – BUSINESS BASICS GRADE 8-TERM THREE - UNIT 1</b> <b>INTRODUCTION TO BASIC ACCOUNTING TERMS</b>			
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>• Explain the purpose of accounting</li> <li>• Identify the main users of accounting and how they use accounting information</li> <li>• Discuss accounting as a scientific process.</li> <li>• Explain simple accounting terms relevant to business transactions.</li> <li>• Differentiate between accounting and book-keeping</li> <li>• Discuss the relevance of the accounting equation to a business</li> </ul>	Creativity & Innovation:	3	1
<ul style="list-style-type: none"> <li>• Classify resources as assets, liability and capital as relevant to business</li> <li>• Apply mathematical operation to re-arrange the accounting equation to find the missing figure.</li> </ul>	Exploring Methods & Procedures	3	1
<ul style="list-style-type: none"> <li>• Calculate the asset, liability and capital of a business using the balance sheet equation.</li> <li>• Construct a simple balance sheet in basic format</li> <li>• Apply basic accounting terminology to the interpretation of business transaction</li> </ul>	Apply Solution	3	1
<ul style="list-style-type: none"> <li>• Identify the careers associated with the accounting practices of business</li> </ul>	Career Pathway	3	1

Grade 8—Resources & Technology – Business Basics – Term 3 Unit 2		
Source Documents used in Business		
Strands	Number of Objectives	Number of “major” objectives
Creativity & Innovation	5	5
Exploring Methods & Procedures	1	1
Apply Solution	3	3
<b>Total</b>	<b>9</b>	<b>9</b>

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<b>RESOURCE &amp; TECHNOLOGY – BUSINESS BASICS GRADE 8-TERM THREE - UNIT 2</b> <b>SOURCE DOCUMENTS USED IN BUSINESS</b>			
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>Define the term source document</li> <li>Identity the main source documents used in business transactions.</li> <li>Define related terms (source document, invoice, receipts, debit note, credit note, cheques)</li> </ul>	Creativity & Innovation:	3	2
<ul style="list-style-type: none"> <li>Distinguish among the various types of source documents used in business transactions.</li> <li>Discuss the importance of each type of source documents used in business transaction.</li> </ul>	Exploring Methods & Procedures	3	2
<ul style="list-style-type: none"> <li>Complete invoices using information from catalogues, pricelists to show unit cost and total cost.</li> <li>Calculate simple discounts/GCT on an invoice.</li> <li>Complete receipt for payments made.</li> <li>Prepare credit notes and debit notes to show adjustments to customers or suppliers account</li> </ul>	Apply Solution	3	2

Grade 8—Resources & Technology – Business Basics – Term 3 Unit 3		
Basic Accounting Records used by a Business		
Strands	Number of Objectives	Number of “major” objectives
Creativity & innovation	3	3
Exploring Methods & Procedures	2	2
Apply Solution	3	3
<b>Total</b>	<b>8</b>	<b>8</b>

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<b>RESOURCE &amp; TECHNOLOGY – BUSINESS BASICS GRADE 8-TERM THREE - UNIT 3</b> <b>BASIC ACCOUNTING RECORDS USED BY A BUSINESS</b>			
<b>Major Objectives</b>	<b>Strands</b>	<b>Term</b>	<b>Unit</b>
<ul style="list-style-type: none"> <li>Define terms books of original entry</li> <li>Differentiate between cash and credit transactions</li> <li>Explain the uses of books of original entry</li> </ul>	Creativity & Innovation:	3	3
<ul style="list-style-type: none"> <li>Identify source documents related to books of original entry</li> <li>Distinguish between receipt and payment in the cash book</li> </ul>	Exploring Methods & Procedures	3	3
<ul style="list-style-type: none"> <li>Use information from source document to post entries in the books of original entry (purchases book, sales book, cash book)</li> <li>Prepare and balance a cash book</li> <li>Interpret balances of the cash book</li> </ul>	Apply Solution	3	3

# JUNIOR ACHIEVEMENT COMPANY OF ENTREPRENEURS (JACE)

## GRADE 9

Grade 9 Junior Achievement Company of Entrepreneurs (JACE)			
Major Objective	Strand	Term	Unit
<ul style="list-style-type: none"> <li>Understand entrepreneurship</li> <li>Define an entrepreneur</li> <li>Be introduced to Innovation</li> <li>Work cooperatively together</li> <li>Understand organizational structure</li> <li>Review various roles outlined for the organizational structure of their teams</li> <li>Develop company teams through an election</li> <li>Form company departments</li> </ul>	Creativity & Innovation:	1	1
<ul style="list-style-type: none"> <li>Create, deliver and capture value of business</li> <li>Understand and outline the 9 building blocks of the business model canvas</li> <li>Explain how the business model canvas helps to develop the business plan</li> <li>Develop an understanding of what is a business model</li> <li>Understand environment impact business will have on Jamaica</li> </ul>		1	1

# CURRICULUM GAP ANALYSIS

## RESOURCE AND TECHNOLOGY – GRADES 8 – 9

**Direction:** This template provides a set of competencies that students are to develop through their exposure to the Resource and Technology component of the NSC. A list of suggested items is provided for the competencies included. Relevant items that address students' characteristics may be extracted for each area of competence, to form a checklist with two (2) options/choices. Some general deficiencies that are associated with the competencies are also included with recommended actions for addressing gaps. Items may also be used by teachers to determine strengths and/or limitations in relation to their practice in facilitating learning through Resource & Technology.

Skills and Competencies	Items for ascertaining Current Standing (Strengths and/Gaps)	Response Format [Yes/No]	General Deficiencies	Recommended Actions through Project Based Learning (See NSC R&T Guides)
21 <sup>st</sup> Century skills:  Communication  Collaboration  Critical Thinking  Creativity  (name any other)	1. Do you generally participate fully in all group activities?  2. Do you maintain a positive attitude during group activities even when faced with challenges?  3. Do you provide feedback in a		Problem solving skills  Written and oral communication skills  Lack of creative skills to work in digital and non-digital environment	Real-world problem-solving exercise requiring student to apply creative solution  Class activities requiring students to write to a classmate about events he or she faced. Drawing on resources such as videos



Skills and Competencies	Items for ascertaining Current Standing (Strengths and/Gaps)	Response Format [Yes/No]	General Deficiencies	Recommended Actions through Project Based Learning (See NSC R&T Guides)
	<p>helpful and friendly way?</p> <p>4. Is there an opportunity provided in class to facilitate the appreciation of opposing points of view?</p> <p>5. Activities given allow students to produce evidence of innovative / creativity and original thinking.</p> <p>6. Do you possess the ability to see beyond superficial facts?</p> <p>7. Do class activities allow you to organize items into meaningful categories?</p>		Inability to collaborate seamlessly in physical and virtual space	<p>and textbooks, while processing content from other subject discipline (integration).</p> <p>Conduct field study or investigation of real-world phenomenon</p> <p>Provide opportunities for students to work on collaborative projects where each student takes responsibility for an aspect of the project</p>

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	<p>8. Do class activities allow you to design and conduct experiment that facilitate learning?</p> <p>9. Do you communicate freely in class and are you always given the opportunity to express your feelings openly?</p>			<p>Develop a class question wall with student-generated questions to guide their thinking</p> <p>Encourage students to come up with as many ideas as they can to solve real world problems then use the design process to select an idea for a designed solution.</p>
STEM/STEAM	<p>1. During class activities do you work in group?</p> <p>2. While doing Resource and Technology (R&amp;T) do you</p>		Show the related application of science and mathematics concepts and principles	<p>Performance task activities requiring the application of STEM principles.</p> <p>Real-world problem-solving</p>

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	<p>have an opportunity to use what you learn in Mathematics?</p> <p>3. While doing Resource and Technology (R&amp;T) do you have an opportunity to use what you learn in Science?</p> <p>4. Some of my class activities involve using my hands and thinking carefully to complete to the task or work.</p>		<p>Inclusion of hands- on activities</p> <p>Reflection on real world or authentic experiences</p> <p>Use and application of ICT tools</p> <p>Promotion and showcasing of student's work</p> <p>Safe use and care for tools and the environment.</p> <p>Providing opportunities for communication and collaboration</p>	<p>exercise requiring student to apply Project Based Learning Activities requiring Hands-on Learning</p> <p>Conduct experiment to solve real world problem</p> <p>Design activities that allow students to apply knowledge and skills to real-world situations by constructing a prototyping solution to a challenge</p> <p>Conduct STEM field trips to science</p>

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	<p>5. The class activities given make me feel like I am working in the real world.</p> <p>6. Do you use hand tools or other small light weight devices or equipment during class activities?</p> <p>7. Have you used the computer or tablet to type, draw, research information, prepare classwork, send or receive information and other activities during class?</p>		<p>Insulated and unconnected application of science and mathematics concepts and principles; no/limited evidence integration of subjects or concepts</p> <p>Inclusion of hands-on activities infrequent or nonexistent</p> <p>Reflection on real world or authentic task is passively engaged</p>	<p>museums, manufacturing business, energy production facilities or transportation hubs to study and research phenomenon</p> <p>Using the problem-based approach to provide authentic opportunities to apply the related mathematics and science concepts/principles to solve problems.</p> <p>Provide opportunities for students to use hand tools and other devices</p>

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	<p>8. Do any of your teachers display or mount (put up) your work for others to see?</p> <p>9. Have you ever done any classwork or activity that made you feel like you were really working in real work? Same as 5</p> <p>10. Have you ever had a class outside the classroom or school ?</p>		<p>No or very limited use and application of ICT tools</p> <p>Limited promotion and showcasing of student's work</p> <p>Uncertain of the safe use and care for tools and the environment.</p> <p>Provision of opportunities for communication and collaboration is lacking or not fully explored</p>	<p>under supervised instruction when working with a range of materials.</p> <p>Identify opportunities and learning episodes where real world or authentic tasks can be actively explored in connecting content for varied levels of meaning making</p> <p>Encourage the display and showcasing of student's work in a variety of forum such science fairs and display boards/corners</p>

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				<p>Promote the safe use and care of the tools, materials and equipment for self, others and the environment</p> <p>Facilitate the infusion of in-class and on-site and off-site activities evidence through field trips and other such engagement</p> <p>Using ICT suite tools to research, present and complete given tasks and activities</p>

Skills and Competencies	Items for ascertaining Current Standing (Strengths and/Gaps)	Response Format [Yes/No]	General Deficiencies	Recommended Actions through Project Based Learning (See NSC R&T Guides)
Digital Citizenship	<ol style="list-style-type: none"> <li>1. Do you know the role of digital media in our lives?</li> <li>2. Did you use digital media to communicate ideas and information?</li> <li>3. Did you use media balance to conduct research, manage projects and make informed decisions?</li> <li>4. Did you act with empathy and positivity when online with teacher and classmates?</li> <li>5. Did you use digital media to</li> </ol>		<p>Digital Footprint and Identity</p> <p>Managing relationships and communication when using digital media</p> <p>Awareness of Cyberbullying</p> <p>The importance of media balance and well-being</p> <p>Maintain privacy and security when using digital media.</p>	<ol style="list-style-type: none"> <li>1. Identify reasons for using social media and the challenges that often come along with it?</li> <li>2. Reflect on the responsibilities they have that are related to digital footprints - both their own and others' when they are using social media.</li> <li>3. Identify ways to make the most of social media while still caring for the digital footprints of themselves and others.</li> <li>4. Consider the different perspectives of those involved in</li> </ol>

Skills and Competencies	Items for ascertaining Current Standing (Strengths and/Gaps)	Response Format [Yes/No]	General Deficiencies	Recommended Actions through Project Based Learning (See NSC R&T Guides)
	<p>work collaboratively to support your own learning needs and the needs of others?</p> <p>6. Did you use digital tools to design and develop creative products that demonstrates learning?</p> <p>7. Do you think that social media affect our digital footprints? If your answer was yes, how does it affect our digital footprint?</p> <p>8. Did you maintain privacy and security</p>			<p>a cyberbullying incident.</p> <p>5. Identify ways to be an upstander or ally to someone being bullied.</p> <p>6. Problem-solve potential challenges to responding to cyberbullying</p> <p>7. Identify research trends related to the health impact of screen time.</p> <p>8. Reflect on the nature of their own screen time and how it compares to that of parents and teens generally.</p>



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	<p>when using digital media?</p> <p>9. Have you ever experienced cyberbullying?</p>			
Career Pathways	<p>1. Do have a career option in mind?</p> <p>2. Are you aware of the common careers that exist?</p> <p>3. Do you understand what is meant by new and emerging careers?</p>		<p>Lack of career education and activities</p> <p>Limited used of career fairs and exhibitions</p> <p>Earning potentials of careers/professions</p> <p>Relationship between skills and subjects needed for particular careers</p>	<p>Research the various career option available and create a list</p> <p>Create a list of traditional and emerging careers</p> <p>Align each career to post-secondary/tertiary institution in Jamaica</p> <p>Identify the motivating factors for selecting a career</p>

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	<p>4. Which of the following would you consider as an emerging career?</p> <p>Doctor <input type="checkbox"/></p> <p>Lawyer <input type="checkbox"/></p> <p>Digital Animator <input type="checkbox"/></p> <p>Drone technologist <input type="checkbox"/></p> <p>Precision Agriculture Technologist <input type="checkbox"/></p> <p>Teacher <input type="checkbox"/></p> <p>5. Do you know the subject areas related to each career?</p>		Factors that influence career choices	<p>Distinguish between low skilled and high skilled careers</p> <p>Identify the subject areas related to each career skills</p> <p>Research on the “soft skills” needed to function in the work place</p> <p>Identify role models with your local environment or across the country/region/world.</p>

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	<p>6. Do you know the tertiary institutions that offer training based on selected careers?</p> <p>7. Can you differentiate between entry level job and highly skilled/qualified jobs?</p> <p>8. Have you ever been informed about soft skills?</p>			

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	<p>9. Can you identify 10 different careers/job function that person in your community are involved in?</p> <p>10. What is the biggest motivation for your career aspirations?</p> <p>Money <input type="checkbox"/></p> <p>Status <input type="checkbox"/></p> <p>Family expectation <input type="checkbox"/></p> <p>Teachers' expectations <input type="checkbox"/></p>			

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	<p>Related adventures</p> <p><input type="checkbox"/></p> <p>Friends <input type="checkbox"/></p> <p>Role models <input type="checkbox"/></p> <p>11. Do you have career role model?</p> <p>If yes, who and why?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>			

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Safety	<p>1. Are safety rules displayed in the lab/classroom?</p> <p>2. Are hand tools properly maintained and kept in a safe condition?</p> <p>3. Are you aware of the laboratory</p>		<p>No safety signs and symbols on display in lab</p> <p>Lack of hand tools for practical and simulations</p> <p>No colour code system established in lab</p>	<p>Safety management protocol developed in keeping with facility standards, SIP and safety manual.</p> <p>Inventory system developed</p> <p>Signage and posters depicting relevant tools.</p>

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	<p>colour coding system?</p> <p>E.g.: Red = danger, yellow = caution, orange = warning, blue=information, green=safety</p> <p>4. Do you observe the warnings issued by each colour while working in the laboratory?</p> <p>5. Is there a fire extinguisher in the laboratory?</p> <p>6. Are you aware of safety guidelines and procedures when entering the lab?</p>		<p>Fire extinguisher not provided, visible or properly service</p> <p>Signage and other posters, chart etc. non-existence</p> <p>Safety gears not compulsory for lab work</p>	<p>Effective Storage and retrieval system provided</p> <p>Plan activities to demonstrate colour coding system and its significance</p> <p>Fire drills conducted to give demonstration on safety protocol.</p> <p>Simulated activities outline safety procedures and guidelines</p> <p>Demonstrations and practical activities developed to allow for safe use</p>

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	<p>7. Are instructions and supervision provided when using hand tools and equipment?</p> <p>8. Are students properly attired in protective clothing when working in the laboratory?</p>			<p>of hand tools and equipment.</p> <p>Safety guidelines established for student attire for lab activities.</p>
Self-Awareness/Reflection/Assessment	<p>1. Do you execute assigned projects based on your personal interest where possible?</p> <p>2. Are you always excited about executing projects that require your special talents and abilities?</p>		<p>Learning task does not allow exploration of personal interest</p> <p>Design of the Learning task does not allow for the utilization of students' special skills and abilities.</p>	<p>Instructional design considers the interest of the students.</p> <p>Alignment of learning context to real world problem.</p> <p>Promotion of reflection as a critical aspect of</p>



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	<p>3. Do you enjoy learning things that prepare you for your future career?</p> <p>4. Do you review your work to check for accuracy while it is being executed?</p> <p>5. Do you think about your completed work and the process of making it?</p> <p>6. After completing a project, do you review the process to identify what went well and the areas that</p>		<p>Design of learning task lack real world application.</p> <p>Limited understanding of reflection as a learning task.</p>	<p>the learning cycle.</p> <p>Guide learners in recognizing the Implication/alignment of learning outcomes to future career.</p>

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	<p>needs improvement?</p> <p>7. As you think about what went well and the challenges encountered are you able to gain insights into possible solutions to make improvements in the future?</p> <p>8. Do you find that you are inclined to apply approaches that have worked in the past to new challenges?</p>			
Employability skills	1. Do you know what is meant by the term		Non- exposure to the range of	Research the range of employability skills and

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	<p>Employability Skill?</p> <p>2. Do you think you are a reliable person?</p> <p>3. In class, were you encouraged to work in teams with your Class mates?</p> <p>4. Did you solve any problems posed in R&amp;T classes?</p> <p>5. Were you given a chance to lead your group in R and T classes?</p> <p>6. Were you given a chance to express your ideas and allowed to explore them in your R and T classes?</p>		employability skills.	demonstrate mastery of these skills in authentic learning tasks

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	<p>7. Do you know what the term Technology means?</p> <p>8. Are you a reliable person? If Yes state why..... .....</p> <p>9. Can you work on your own and make decisions without the help of your teacher?</p> <p>10. Are you an effective communicator?</p> <p>11. Do you communicate on Social Media?</p> <p>12. Are you apart of any sport team or Club in your School?</p> <p>13. Do you acknowledge your mistakes and make a conscious effort</p>			

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	<p>to avoid them in the future?</p> <p>14. Do you participate in brainstorming sessions in class?</p> <p>15. Do you undertake research assignments and projects?</p> <p>16. Do you write down your tasks and activities in a planner?</p> <p>17. Do you ask for more responsibilities in class?</p> <p>18. Do you participate in volunteer work that allows you to work independently?</p>			
Literacy and Numeracy	1. Are you able to decode words,		Advanced literacy and numeracy	

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	<p>read and send a text message on your phone?</p> <p>2. Can you read and follow a user manual of instructions in a package for assemblage?</p> <p>3. Are you able to evaluate arguments and learn new things online?</p> <p>4. Are you able to interpret, negotiate and make meaning from information presented in the form of an image?</p>		<p>skills are prerequisites for success in vocational or academic occupations in the 21<sup>st</sup> century</p> <p>The concept of literacy needs to be broadened to include a set of competencies that go well beyond the ability to recognize words and decode text.</p> <p>There are disparities in numeracy and literacy outcomes of children from different socioeconomic background.</p>	<p>To better prepare students for the literacy and numeracy demands in the 21<sup>st</sup> and reduce the existing disparities. the following is proposed</p> <ul style="list-style-type: none"> <li>• Identify and introduce multiple points of entry into numeracy and literacy for example Visual Literacy, Object-Based Learning.</li> <li>• Incorporate the use of technologically advanced tools used in the work place to support</li> </ul>

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	<p>5. Are you able to count quantities for a customer?</p> <p>6. Are you able to use percentage and subtraction when giving a discount?</p> <p>7. Are you able to calculate cost per head?</p> <p>8. Are you able to measure the area of shapes?</p> <p>9. Do you understand tables in a report and be able to interpret graphs?</p>		<p>Today's economy with its complex political and social challenges demands strong literacy and numeracy skills, in order to participate constructively.</p>	<p>reading in the classroom and their use in the digital age.</p> <ul style="list-style-type: none"> <li>• Offer more technical and analytical reading and mathematics skills as required by the labour market, in order to read and understand instructions in the work place.</li> <li>• Develop resources and strategies to provide for undiagnosed learning disabilities to provide for health literacy skills.</li> </ul>

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	10. Can you calculate fuel consumption?			



The NSC Guides are to be used to obtain additional information for appropriate planning and to facilitate children's learning in ways that are appropriate for their profile. Other areas of interest that provide enriching and experiences may also be obtained from these guides.





