**Term 1.**

**Unit: Natural Systems**

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| **Unit/Topic** | **General Objective** | **Specific Objective** | **Content Summary** |
| **Internal Forces-Structure of the Lithosphere/Plate Tectonics** | 1. Understand geomorphic systems.
2. Understand the various processes that occur within natural systems.
3. Understand the relationship between the natural and human systems.
 | 1. Describe the internal structure of the Earth.
2. Draw a diagram showing the layers of the Earth.
3. Explain the theory of plate tectonics.
4. Analyze diagrams which show the movement of plates over the years.
5. Describe the consequences of the movement of plates.
 | 1. The Internal structure of Earth including continental and oceanic plates, crust, mantle and core.
2. The theory of plate tectonics, including global distribution of plates, movement of plates and types of plate boundary.
3. The distribution of island arcs, fold mountains, major faults and ocean trenches.
 |
| ***Assessment/Evaluation*** |
| * Group work
* Create models
 |

**Term 1**

**Unit: Natural Systems-Internal Forces**

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| **Unit/Topic** | **General Objectives** | **Specific Objectives** | **Content Summary** |
| **Internal Forces-Earthquakes** | 1. Understand geomorphic systems.
2. Understand the various processes that occur within natural systems.
3. Understand the relationship between the natural and human systems.
 | 1. Formulate a definition for the term earthquake.
2. Explain how earthquakes occur at plate margins.
3. Describe the occurrence and distribution of earthquakes on a local, regional and global scale.
4. Describe the impact of earthquake on man and his environment.
 | 1. Definition of earthquake.
2. Formation of earthquake at plate margins.
3. Global distribution of earthquakes.
4. Social, economic and physical impact of earthquake on man and the environment.
 |
| ***Assessment/Evaluation*** |
| * Group Work
 |

**Term 1**

**Unit: Natural Systems**

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| **Unit/Topic** | **General Objectives** | **Specific Objectives** | **Content Summary** |
| **Internal Forces: Volcanoes** | 1. Understand geomorphic systems.
2. Understand the various processes that occur within natural systems.
3. Understand the relationship between the natural and human systems.
 | 1. Define the term volcano.
2. Draw and label the features of a volcano.
3. Explain how volcanoes are formed at different plate boundaries.
4. List the various materials ejected from a volcano.
5. Describe the various features (intrusive and extrusive) associated with a volcano.
 | 1. Definition for volcano.
2. Features of a volcano.
3. Formation of volcanoes at plate margins, as well as Hot-Spot volcanoes.
4. Materials ejected from a volcano.
5. Types of lava.
6. Intrusive (sills, dykes, plugs and batholiths) and extrusive (caldera, shield volcano, composite cone, lava plateau). features of a volcano.
 |
| ***Assessment/Evaluation*** |
| * Create models
 |

**Term 1**

**Natural Systems**

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| **Unit/Topic** | **General Objectives** | **Specific Objectives** | **Content Summary** |
| **Internal Forces: Rock Formation** | 1. Understand geomorphic systems.
2. Understand the various processes that occur within natural systems.
3. Understand the relationship between the natural and human systems.
 | 1. Explain the rock cycle.
2. List/classify rocks as either: igneous, sedimentary or metamorphic.
3. Describe the use of various types of rocks.
 | 1. The rock cycle: formation of igneous, sedimentary and metamorphic rocks.
2. The use of various types of rocks.
 |
| ***Assessment/Evaluation*** |
| * Group work
 |

**Term 1**

**Unit: Natural Systems**

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| **Unit/Topic** | **General Objectives** | **Specific Objectives** | **Content Summary** |
| **External Forces: Weathering and Mass Wasting** | 1. Understand geomorphic systems.
2. Understand the various processes that occur within natural systems.
3. Understand the relationship between the natural and human systems.
 | 1. Define weathering.
2. Explain the processes of weathering.
3. Explain the processes of mass movement.
 | 1. Definition of weathering, emphasizing *‘in situ’* condition.
2. Location, processes and results of chemical weathering (carbonation and hydrolysis).
3. Location, processes and results of physical weathering (frost action, exfoliation).
4. Processes and results of biological weathering.
5. Definition, causes and results of mass movement. (soil creep and landslides).
 |
| ***Assessment/Evaluation*** |
| * Work sheet
* Group work
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**Term 1 Unit: Natural Systems**

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| **Unit/Topic** | **General Objectives** | **Specific Objectives** | **Content Summary** |
| **External Forces: Limestone** | 1. Understand geomorphic systems.
2. Understand the various processes that occur within natural systems.
3. Understand the relationship between the natural and human systems.
 | 1. Define the term limestone.
2. List the characteristics of limestone.
3. Explain the formation of limestone features in the Caribbean.
 | 1. Definition of limestone.
2. The characteristics of limestone and the processes leading to the formation of limestone features created on the surface (clints and grykes, surface depressions, cockpits, swallow holes) and underground (caves, stalactites, stalagmites, pillars, underground rivers).
 |
| ***Assessment/Evaluation*** |
| * Group work
* Activity Sheet
* Debates
 |

**Term 2**

**Unit: Practical Skills and Field Study**

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| **Unit/Topic** | **General Objectives** | **Specific Objectives**  | **Content Summary** |
| **Map Reading & Field Study (SBA).** | 1. Acquire practical skills and techniques in drawing sketch maps and diagrams and in reading and interpreting maps, photographs, tables and graphs which give geographical information.
 | 1. Read conventional (map) symbols.
2. Interpret conventional (map) symbols.
3. Locate places, using four and six-figure grid references.
4. Give direction of one place to another using the 16 points of the compass.
5. Measure the grid bearing of one place in relation to another
6. Use the scale to measure straight and curved distances.
7. Copy, Reduce & Enlarge a section of a map.
8. Draw and interpret cross-sections and sketch sections.
9. Calculate gradients.
10. Draw diagrams to illustrate geographical features.
11. Collect, record and present information based on a geographical field study on at last one (1) chosen objective from the syllabus.
 | 1. Essential elements of maps (title, scale, legend, north point and borders); placement of labels and the use of colours).
2. Grid reference-4 & 6 figures.
3. Compass Direction (16 points).
4. Grid bearings measured clockwise from Grid North (indicated by the direction of the Easting lines).
5. Measuring straight and curved distance (to nearest 100 metres).
6. Copying, reducing or enlarging topographic maps guided by the map scale.
7. Cross sections and sketch sections including inter-visibility (profile view of the landscape and relief and whether or not one point could be seen from another).
8. Calculate gradient, using ratios and percentages.
 |
| ***Assessment/Evaluation*** |
| * Map work
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**Term 2 Unit: Natural Systems-Atmosphere and Biosphere**

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| **Unit/Topic** | **General Objectives** | **Specific Objectives** | **Content Summary** |
| **Atmosphere and Biosphere: Weather and Climate.** | 1. Understand atmospheric systems.
2. Understand the various processes that occur within natural systems.
3. Understand the relationship between the natural and human systems.
 | 1. Differentiate between weather and climate.
2. Explain the factors influencing the weather and climate of a place.
3. Illustrate weather systems, using isobars and relevant symbols.
4. Interpret rainfall and temperature graphs and maps.
5. Describe the characteristics of the Equatorial and Tropical Marine Climates.
6. Describe weather conditions associated with Caribbean weather systems.
7. Describe the “greenhouse effect”.
8. Describe ways in which human activities influence climate change.
9. Compare the consequences of climate change in the Caribbean with those in ***either*** the **USA** **or** the **UK.**
10. Compare measures to reduce the effects of climate change in the Caribbean with those of either the USA or the UK.
 | 1. Difference between weather and climate.
2. Factors influencing weather and climate: altitude; latitude, relief, distance from the sea (continentality) and winds (land and sea breeze).
3. Characteristics of Equatorial and Tropical Marine Climates-temperature, precipitation, pressure.
4. Weather conditions associated with Caribbean weather systems: tropical waves, hurricanes and cold fronts (before, during and after). **ITCZ** and anticyclones.
5. Insolation, radiation and the role of greenhouse gases in heating the earth.
6. Human activities that contribute to global warming and influence climate change (such as deforestation and activities that lead to emissions of carbon dioxide and other greenhouse gases).
7. Examples of the consequences of Climate Change in the Caribbean and either **USA** or the **UK**: for example: sea level rise-increased incidence of coastal flooding, impacts on coral reefs, coastal wetlands and settlements in weather patterns and their impacts.
8. Measures to reduce the effects of climate change in the Caribbean and that of either the **USA** *or* the **UK** (for example, mitigation measures including reduced emissions, sustainable forestry, education).
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| ***Assessment/Evaluation**** Group Work
* Work Sheets
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**Term 3 Unit: Natural Systems**

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| **Unit/Topic** | **General Objectives** | **Specific Objectives** | **Content Summary** |
| **Hydrosphere-Fluvial Processes: Rivers** | 1. Understand Fluvial systems.
2. Understand the various processes that occur within natural systems.
3. Understand the relationship between the natural and human systems.
 | 1. Describe the hydrological cycle.
2. Describe river processes.
3. Explain the formation of river landforms.
4. Describe drainage patterns.
 | 1. The hydrological cycle (evaporation, condensation, precipitation, transpiration, run-off, infiltration, through-flow, percolation, ground water flow) and its features (springs, aquifers, water table).
2. Drainage system-fluvial processes (erosion, transportation and deposition).
3. Fluvial landforms-river valleys, waterfalls, meanders, braided channels, ox-bow lakes, levees, flood plains, deltas.
4. Drainage patterns-dendritic, trellis, radial and relationship to rock type and geology.
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