

SEMESTER ONE

GRADE: 10
 PERIOD: 1
 UNIT 1: PHYSICAL GEOGRAPHY – THE SOLAR SYSTEM
 TOPIC I: **THE EARTH AS A PLANET**

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
<p>Learners are able to:</p> <p>Relate life on the earth to its planetary position in space and determine time difference in relation to the earth rotation.</p>	<p>Upon completion of this topic: learners will:</p> <ol style="list-style-type: none"> Describe the solar System in relation to its formation Draw a diagram of the solar system to show the planets in orbit around the sun 	<ol style="list-style-type: none"> <u>The</u> composition of the universe The formation and structure of the solar system <u>The planets</u> Space exploration The moon and its impact 	<p><u>Inclusive Education and Differentiated Learning</u></p> <p>Individual seat work or mixed groups according to gender, abilities and learning styles</p> <p><u>ACTIVITIES</u></p> <ol style="list-style-type: none"> Learners draw the solar system and explain its structure and formation Calculate time in different zones In a group, learners demonstrate the concept of rotation and revolution of the earth Calculate time in the eastern and western hemispheres Use flash light and football to demonstrate the causes of day and night 	<p>Primary Text: General geography in Diagram for West Africa, Physical Geography.</p> <p>Other:</p> <ol style="list-style-type: none"> Globe Flash light football pictures of the solar system <p>DISCOVER A-Z OF GEOGRAPGY WASSCE Q & A (PAPER 1 &2) www.apsstudent.collegeboard.org</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> Analytical Skill Creativity skill <p><u>ASSESSMENT STRATEGIES</u></p> <p><u>That can be used to check competencies. Select relevant options:</u></p> <ul style="list-style-type: none"> Oral questions Assignments Quiz Group presentation

SEMESTER ONE

GRADE: 10

PERIOD: 1

UNIT1: Physical Geography – The Solar System

TOPIC II: **SHAPE & SIZE OF THE EARTH**

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS/	COMPETENCY/ASSESSMENT
<p>Learners are able to Elaborate the concepts of Diameters and Circumferences and prove the shape of the earth.</p>	<p>Upon completion of this topic: learners will:</p> <ol style="list-style-type: none"> 1. Explain the concepts of Equatorial Circumference, Equatorial Diameter, Polar Circumference, and Polar Diameter 2. Measure the a) Equatorial circumference b) Polar circumference c) Polar diameter d) Equatorial diameter 3. Prove the shape of the earth by calculating the differences between the diameters and the circumferences 	<ol style="list-style-type: none"> 1. Earth's Dimension <ol style="list-style-type: none"> a) Equatorial circumference b) Equatorial diameter c) Polar circumference d) Polar diameter e) Differences in length between equatorial circumference f) Differences in length between equatorial diameter and polar diameter 2. Shape of the Earth <ol style="list-style-type: none"> a) Description b) Proof of the Earth's spherical shape. c) Inferential, Aerial photographs. d) Circumnavigation of the earth e) Lunar Eclipse, earth's curved f) Horizon, sunrise Sunset g) Bedford canal experiment. 	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc</p> <p><u>ACTIVITIES</u></p> <ol style="list-style-type: none"> 1. Using a string, ruler and orange or egg, learners in a small group, will measure Equatorial circumference; Polar circumference; Polar diameter; and Equatorial diameter 2. As an exercise, learners will Plant three poles of equal height on a level ground and observe the height of the center pole to proof the spherical shape of the earth. 	<p>Primary Text: General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 Map reading for west Africa Certificate Physical and Human Geography</p> <p>DISCOVER A-Z OF GEOGRAPHY</p> <p>WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical Skill • Creative skill • Research skill <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options:</u></p> <ul style="list-style-type: none"> • Oral questions • Assignments • Quiz • Group presentation

SEMESTER ONE

GRADE: 10

PERIOD: 1

UNIT 1: Physical Geography – The Solar System

TOPIC III: LATITUDE, LONGITUDE AND TIME

LERNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
<p>Learners are able to demonstrate understanding of latitudes and longitudes</p>	<p>Upon completion of this topic, learners will:</p> <ol style="list-style-type: none"> 1. Relate the terms latitudes and longitudes 2. Discuss the major latitudes and longitudes 3. Explain the uses of longitudes and latitudes 	<ol style="list-style-type: none"> 1. Define Latitudes <ol style="list-style-type: none"> a) Major latitudes: i) Equator b) Uses of Latitudes 3. Longitudes definition b) Major longitudes – 4. Uses of Longitudes 5. Reticules a) Finding positions on maps 6. North And South Poles a) Values (in degrees) b) Types of north: i) True North ii) Magnetic north iii) Grid north iv) Magnetic declination 7 Great circle 	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc</p> <p><u>ACTIVITIES</u> Learners will work in small groups to identify and show the importance of the longitude and latitude.</p> <p>Learners will compare and contrast great circles and small circles of the earth.</p> <p>Learners will outline major latitude and longitude lines on the globe.</p>	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 Map reading for west Africa Certificate Physical and Human Geography DISCOVER A-Z OF GEOGRAPGY</p> <p>WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPENTENCIES</u></p> <ul style="list-style-type: none"> • Analytical Skill • Effective Communication skill <p><u>ASSESSMENT STRATEGIES That can be used to check competencies. Select relevant options</u></p> <ul style="list-style-type: none"> • Oral questions • Assignments • Quizzes'

SEMESTER ONE

GRADE: 10

PERIOD: 1

UNIT1: Physical Geography – The Solar System

TOPIC IV: **THE EARTH'S MOVEMENTS**

LERNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
<p>Learners are able to distinguish the concepts of earth rotation and revolution as well as apply the Ferrell's law of deflection</p>	<p>Upon completion of this topic, learners will:</p> <ol style="list-style-type: none"> 1. Differentiate between the concepts of rotation and revolution of the earth 2. Explain the terms associated with the rotation and revolution of the earth 3. Describe the effects of the earth's rotation and revolution 4. Discuss the deflection of winds and ocean currents using Ferrell's law 	<ol style="list-style-type: none"> 1. The Rotation of the Earth <ol style="list-style-type: none"> a) Definition b) Effect of rotation 2. The Revolution of the Earth <ol style="list-style-type: none"> a) Definition b) Terms associated with the revolution of the earth etc.) c) Effect of revolution d) Similarities and Differences between rotation and revolution 	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities and learning styles</p> <p><u>ACTIVITIES</u></p> <ol style="list-style-type: none"> 1. Learners carry out experiment by Pointing flash light at a football to demonstrate the appearance of day and night. 2. Learners will spin the globe or football to indicate movement of the earth. 3. Learners draw a simplified diagram of the earth showing the movement of winds to the north and south of the equator 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 Map reading for west Africa Certificate Physical and Human Geography</p> <p>C DISCOVER A-Z OF GEOGRAPY WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical Skill • Research skill • Creative skill • Communication skill <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <ul style="list-style-type: none"> • Oral questions • Assignments • Quizzes' • Group presentation

SEMESTER ONE

GRADE: 10

PERIOD: II

UNIT 1: Physical Geography – The Solar System

TOPIC 1: THE EXTERNAL STRUCTURE OF THE EARTH

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
<p>Learners are able to discuss features of the earth's surface.</p>	<p>UPON COMPLETION OF THIS TOPIC, LEARNERS WILL:</p> <ol style="list-style-type: none"> 1. Distinguish between the external and internal layers of the earth 2. Discuss the features of the geologic layers of the earth's surface 	<ol style="list-style-type: none"> 1. Layers of the earth (characteristics and components) <ol style="list-style-type: none"> a) External features <ul style="list-style-type: none"> - Atmosphere - Hydrosphere - Biosphere d) Internal features <ul style="list-style-type: none"> - Lithosphere: - Barysphere/Core - Mesosphere/ Mantle 	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc</p> <p><u>ACTIVITIES</u></p> <ol style="list-style-type: none"> 1. Draw a simplified diagram of the earth's internal and external structure to show the different types of layers. 2. Field trip to identify external and internal layers of the earth. 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. Map reading for west Africa Certificate Physical and Human Geography</p> <p>DISCOVER A-Z OF GEOGRAPGYWASS CE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical Skill • Effective Communication skill <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <ul style="list-style-type: none"> • Field report • Oral questions • Assignments • Quizzes' • Group presentation

SEMESTER ONE

GRADE: 10

PERIOD: II

UNIT 1 Physical Geography

TOPIC II: ROCKS AND MINERALS

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to differentiate between rocks and minerals, outline the characteristics of rock and minerals and state the economic importance of rocks	<p>UPON COMPLETION OF THIS TOPIC, LEARNERS WILL:</p> <ol style="list-style-type: none"> 1. Distinguish between rocks and minerals 2. Classify rock in relations to mode of formation. 3. List the main characteristics and uses of each type of rock. 	<ol style="list-style-type: none"> 1. Rocks and Minerals 2. Rocks <ol style="list-style-type: none"> a) Classification of rock b) Characteristics of rock c) Uses of Rock <ul style="list-style-type: none"> - Igneous - Metamorphic - Sedimentary d) Importance of the crust <ul style="list-style-type: none"> - Sial - Sima 	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc</p> <p><u>ACTIVITIES</u></p> <ol style="list-style-type: none"> 1. Group discussion: learners collect different types of rocks from the community/school and classify different samples of rock types 2. Group discussion on rock texture. Hardness and color of rock pieces / samples; the mode of formation and uses of 	<p>General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 Map reading for west Africa Certificate Physical and Human Geography</p> <p>DISCOVER A-Z OF GEOGRAPHY WAS SCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical Skill • Communication skill • Creative skill • Research and problem solving skill <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <ul style="list-style-type: none"> • Oral questions • Assignments • Quizzes' • Group presentation

SEMESTER ONE

GRADE: 10

PERIOD: III

UNIT 2: HUMAN AND REGIONAL GEOGRAPHY- WORLD POPULATION AND SETTLEMENT

TOPIC 1: **POPULATION**

LEARNING OUTCOMES	OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
<p>Learners are able to:</p> <p>Explain world population and the distribution patterns</p> <p>Recognize factors that influence population movements, the importance of family planning and empowerment as well as population census.</p>	<p>1. UPON COMPLETION OF THE TOPIC, LEARNERS WILL: Discuss the term “World population”</p> <p>2. Explain population distribution patterns of the world.</p> <p>3. Distinguish between overpopulation and under population</p> <p>4. Explain the factors that influence population movements</p> <p>5. Demonstrate the conduct of population census.</p> <p>6. Recognize the importance of family planning and empowerment as a means of controlling population growth</p>	<p>1. World Population – definition, distribution, factors affecting growth. Terms associated with population growth, etc.</p> <p>2. Population control and family planning</p>	<p><u>INCLUSIVE AND DIFFERENTIATED LEARNING</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc</p> <p><u>ACTIVITIES</u></p> <p>1. Draw population maps indicating densely and sparsely population regions.</p> <p>2. List some overpopulated and underpopulated counties/countries.</p> <p>3. Field trip to identify types of settlements, over and under-populated regions of Liberia.</p> <p>4. Hold debates to discuss population control in relation to family planning and women empowerment</p>	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 Map reading for west Africa Certificate Physical and Human Geography</p> <p>DISCOVER A-Z OF GEOGRAPHY ASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Research and problem solving • Creative skills <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <ul style="list-style-type: none"> • Fieldtrip • Oral questions • Assignments • Quizzes’ • Tests.

SEMESTER ONE

GRADE: 10
 PERIOD: III
 UNIT 2: **HUMAN AND REGIONAL GEOGRAPHY**
 TOPIC II: SETTLEMENT

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to distinguish between rural and urban settlements, outline the consequences of migration and suggest ways to minimize migration	<p>UPON COMPLETION OF THE TOPIC, learners will:</p> <ol style="list-style-type: none"> 1. . Identify the types of settlement and settlement patterns. 2. Analyze the factors affecting settlement growth. 3. Explain the functions of settlements. 4. Explain the consequences of migration at the source and receiving regions 5. Advance possible solutions to migration. 	<p>1 . Types of Settlement i) Urban : i) Cities ii) Towns iii) Metropolis iv) Satellite towns, etc. ii) Rural: a) Villages b) Cottages c) Farmstead, etc</p> <p>2. Factors Affecting Settlement Growth: a) Economic, b) Political, c) Social d) Physical topography, etc</p> <p>3) Migration - consequences - Mitigation</p>	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc</p> <p><u>ACTIVITIES</u></p> <ol style="list-style-type: none"> 1 Learners discuss factors affecting settlement growth, and draw diagram of settlements 2 List the contribution of rural and urban settlements to mankind. 3 Learners work in groups to outline the consequences of migration at the source and receiving regions 4 Learners work in groups to identify problem associated with migration and suggest solution 	<p>General Geography in Diagrams (Pearson) B.</p> <p>Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>Map reading for west Africa Certificate Physical and Human Geography DISCOVER A-Z OF GEOGRAPY WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPENTENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Research and problem solving <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <ul style="list-style-type: none"> • Oral questions • Assignments • Quizzes' • Tests

SEMESTER TWO

GRADE: 10
 PERIOD: IV
 UNIT 3 :PRACTICAL GEOGRAPGY—USING MAPS
 TOPIC: MAP READING

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to: interpret maps information and convert scales Design diagrams and determine positions of places.	UPON COMPLETION OF THE TOPIC, LEARNERS WILL: 1. Interpret map information 2. Distinguish kinds of maps 3. Convert from one scale to another 4. Apply skills to reduce, enlarge, and calculate areas and ground distances of maps using map scales 5. Calculate the gradient of slopes 6. Discover the positions of places using the grid system, or longitudes and latitudes 7. Determine directions using the compass and bearing 8. Design diagrams, profiles and sketches resulting from survey exercises	1. Map - Definition and characteristics & types - Importance/Uses - Limitations of Maps 2. Definition of Map Scale - Representative Fraction - Statement - Linear (Advantages and disadvantages of each type) - Conversion of Map Scales	<u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc <u>ACTIVITIES</u> 1 .Learners outline and discuss the kinds of map and indicate their features. 2 Learners draw map to scale, reduce and enlarge maps and State the limitations of maps 3 Draw the prismatic compass and illustrate its direction and bearing 4 Prepare an annotated map using the three types of map scales.	General Geography in Diagrams (Pearson) B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 Map reading for west Africa Certificate Physical and Human Geography DISCOVER A-Z OF GEOGRAPGY WASSCE Q & A (PAPER 1 &2)	<u>EXPECTED COMPETENCIES</u> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Creative skills <u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u> <ul style="list-style-type: none"> • Oral questions • Assignments • Quizzes' • Tests

SEMESTER TWO

GRADE: 10

PERIOD: V

UNIT 1: PHYSICAL GEOGRAPHY—ENVIRONMENTAL SCIENCE

TOPIC: LAND AND WATER DISTRIBUTION

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
<p>Learners are able to:</p> <p>Elaborate on the various forms of land and water masses, their importance to mankind</p> <p>Explain the major environmental hazards that result from natural and human activities</p>	<p>UPON COMPLETION OF THIS TOPIC, STUDENTS WILL:</p> <ol style="list-style-type: none"> 1. Determine the ratio of land to water 2. Determine how much land is suitable for agriculture 3. Identify the various forms of water masses 4. Discuss the importance of land and water masses to man 5. Explain the major environmental hazards occurring as a result of natural and human activities 	<ol style="list-style-type: none"> 1 The continents 2. The islands i) 3. Vegetation resources 4. Mineral resources 5. Case study i) Mineral resources of Liberia, West Africa and other parts of Africa. 6 Water Resources The Oceans, seas, Rivers, Lakes, Rias, etc. 	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles,</p> <p><u>ACTIVITIES</u></p> <ol style="list-style-type: none"> 1. Learners diagram the earth's surface to identify land and water positions, providing the ratio of land and water; 2 Group learners and let them identify and discuss the appropriate land for agriculture production; environmental hazards due to activities of man and natural causes. 3 Brainstorm and discuss the continents and oceans of the world and show their locations using maps; Field trip to identify variations in vegetation and mineral types. 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 Map reading for west Africa Certificate Physical and Human Geography C. Other Supplementary Readings</p> <p>Discover A-Z of geography WASSCE Q & A (paper 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Creative skills <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <ul style="list-style-type: none"> • Field report • Oral questions • Assignments • Quizzes' • Tests

SEMESTER TWO

GRADE: 10

PERIOD: V

UNIT 1: PHYSICAL GEOGRAPHY—ENVIRONMENTAL SCIENCE

TOPIC: POLLUTION OF LAND AND WATER

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
<p>Learners are able to identify the different types of pollution, their effects on the ecosystem, and create awareness for control measures.</p>	<p>UPON COMPLETION OF THE TOPIC, STUDENTS WILL:</p> <ol style="list-style-type: none"> 1. Elaborate on pollution and its kinds 2. State the effects of pollution on the environment 3. Suggest ways through which pollution can be minimized and controlled 4. Discuss land ecosystem 	<ol style="list-style-type: none"> 1 Land Pollution Sources of land pollution Effects of land pollution Prevention/Control 2. Water Pollution Sources of Water Pollution: River contamination(used of D.D.T and others), industrial waste etc Effects of water pollution. 3. Land Ecosystem i) Meaning and components ii) Food chain iii) Land reclamation iv) Nutrient Cycle v) Problem and Solution 	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc <u>ACTIVITIES</u></p> <ol style="list-style-type: none"> 1 Learners work in group to identify sources of land and water pollutions in the environment; 2 Group discussion and presentation on the ways of controlling land and water pollution 3 Outline the chemicals that are responsible for the contamination of water and land. 4 Class discussion/assignment: Define land ecosystem and name the components, identifying the elements that make up the ecosystem; 	<p>General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 Map reading for west Africa Certificate Physical and Human Geography DISCOVER A-Z OF GEOGRAPHY WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Research and problem solving <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <ul style="list-style-type: none"> • Oral questions • Assignments • Quizzes' • Tests

SEMESTER TWO

GRADE: 10

PERIOD: V

UNIT 1: PHYSICAL GEOGRAPHY—ENVIRONMENTAL SCIENCE

TOPIC: ENVIRONMENTAL BALANCE--SOILS

LEARNING OUTCOMES	OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to identify the different types of soil, state their importance to the growth and development of plants and animals to mankind	<p>upon completion of the topic, students will</p> <ol style="list-style-type: none"> 1. Classify the different soil types based on their characteristics 2. Discuss the factors involved in soil formation 3. Examine the influences on soil fertility 4. Elaborate on the importance of soil to human and animal life 	<ol style="list-style-type: none"> 1. Soil Types and characteristics 2. Soil Formation 3. Processes of Soil formation <ol style="list-style-type: none"> i) Humidification ii) Mineralization etc.) 3. Soil Fertility 4. Importance of Soil <ol style="list-style-type: none"> i) Plant life ii) Provision of Minerals iii) Source of raw materials iv) Base for construction v) Habitat for fauna and Flora 	<p>Inclusive and differentiated learning</p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <ol style="list-style-type: none"> 1. Group learners (mixed) to identify the different soil types and their characteristics; 2. Draw soil profile and label the layers. 3. Group discussion on the formation of soil and the importance for agricultural and construction activities 4. Learners outline different soil types in Liberia; 	<p>A. Primary Text</p> <p>General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 Map reading for west Africa Certificate Physical and Human Geography DISCOVER A-Z OF GEOGRAPHY WASSCE Q & A (PAPER 1 & 2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Research and problem solving • Creative skill <p><u>ASSESSMENT STRATEGIES</u></p> <p><u>That can be used to check competencies.</u></p> <p><u>Select relevant options</u></p> <p>Oral questions Assignments Quizzes' Tests</p>

SEMESTER TWO

GRADE: 10

PERIOD: V

UNIT 1: PHYSICAL GEOGRAPHY—ENVIRONMENTAL SCIENCE

TOPIC: ENVIRONMENTAL HAZARDS

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to outline the kinds of environmental hazards and propose prevention mechanism	<p>UPON COMPLETION OF THE TOPIC, LEARNERS WILL:</p> <ol style="list-style-type: none"> List the different kinds of environmental hazards Propose ways to avoid or manage environmental hazards 	<p>1. Environmental Hazards: Meaning, Types, causes, effects and Control;</p> <p>2. Soil Erosion and Depletion</p> <p>3. Drought</p> <p>4 Deforestation, global warming, Drought, Desertification, Meaning,) Causes: Loss of farmlands, Aridity, change in pattern of agriculture, Prevention/Control vii)</p> <p>5. Flooding i) Meaning ii) Causes: iii) Precipitation iv) Melting of ice, etc v) Effects: vi) Displacement of population, loss of life and property, etc vii) Prevention and control</p>	<p>Inclusive and differentiated learning Individual seat work or mixed groups according to gender, abilities, learning styles, etc</p> <ol style="list-style-type: none"> Learners identify and discuss incidences of environmental hazards locally and elsewhere Group discussions on the causes and effects of environmental hazards; Learners to state the appropriate and acceptable definition of environmental hazards Using poster sheets let learners list and describe the different kinds of environmental hazards; learners outline preventive methods to constructively control hazards. Field trip to identify areas affected by environmental hazards. 	<p>General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 Map reading for west Africa Certificate Physical and Human Geography DISCOVER A-Z OF GEOGRAPHY</p> <p>WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> Analytical skill Effective communication Research and problem solving Creative skill <p><u>ASSESSMENT STRATEGIES</u></p> <p><u>That can be used to check competencies. Select relevant options</u></p> <p>Field report Oral questions Assignments Quizzes' Tests</p>

SEMESTER TWO

GRADE: 10

PERIOD: VI

UNIT 1: PHYSICAL GEOGRAPHY—

TOPIC: INTRODUCTION TO LAND FORMS

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to classify land forms and relate the formation of mountains, plateaus and plains	<p>upon completion of the topic, students will</p> <ol style="list-style-type: none"> 1. Describe land forms 2. Classify landforms in relation to structure 3. State the importance of landforms 4. Summarize the formation of mountains, plateau and plains 	<ol style="list-style-type: none"> 1 Land forms 2. Types of mountains: <ol style="list-style-type: none"> a. Fold mountain b. Volcanic mountain c. Block mountain d. Residual mountain 3. Define and describe the formation of the four types of mountains and locate their regions. 4. Economic importance of the four types of mountains 5. Advantages and disadvantages of the mountains. 	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc</p> <ol style="list-style-type: none"> 1. Class exercise: Diagram the four types of mountains; 2. Group discussion on the importance of the four types of mountains; 3. Field trip to a mountain to show the base and peak, and also show the differences between mountains, plateau and plains. 4. Illustrate mountain formation and volcanic activity. 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 C Map reading for west Africa Certificate Physical and Human Geography</p> <p>DISCOVER A-Z OF GEOGRAPHY</p> <p>WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Research and problem solving • Creative skill <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u> Fieldtrip Oral questions Assignments Quizzes? Tests</p>

SEMESTER TWO

GRADE: 10

PERIOD: VI

UNIT 1: PHYSICAL GEOGRAPHY—

TOPIC: HYDROSPHERE

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to demonstrate knowledge of hydrosphere in relation to its importance and discuss the water cycle.	<p>upon completion of the topic, students will:</p> <ol style="list-style-type: none"> 1. Identify the components of Hydrosphere. 2. Compare the importance of hydrosphere to life on planet earth 3. Relate the hydrosphere to other natural features of the earth 4. Analyze the water cycle. 	<ol style="list-style-type: none"> 1 Definition and component of the hydrosphere: <ol style="list-style-type: none"> a. Oceans b. Seas c. Rivers d. Lakes, etc. 2 Diagram and analysis of the water cycle; 3 State the importance of the hydrosphere; 	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc</p> <ol style="list-style-type: none"> 1. Group discussion on the meaning and the components of the hydrosphere; 2. Field trip to identify the various water bodies that constitute the hydrosphere. 3. State the importance of hydrosphere to life on planet earth 4. Diagram the water cycle. 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 C Map reading for west Africa Certificate Physical and Human Geography DISCOVER A-Z OF GEOGRAPHY WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Research and problem solving • Creative skill <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u> Fieldtrip Oral questions Assignments Quizzes' Tests</p>

SEMESTER TWO

GRADE: 10

PERIOD: VI

UNIT 1: PHYSICAL GEOGRAPHY—

TOPIC: LITHOSPHERE

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to discuss the lithosphere as the land block of the earth with emphasis on its external and internal portions, and its importance to life on earth	<p>upon completion of the topic, learners will:</p> <ol style="list-style-type: none"> 1. Classify the internal and external composition of the Lithosphere 2. Outline the different land blocks-i.e. the continents. 3. Compare the lithosphere to other natural features of the earth 	<p>1 Definition and composition of lithosphere:</p> <ol style="list-style-type: none"> a. Land blocks (continents) b. Internal composition (Sial & Sima) c. External composition (continents) <p>2 Map of the continents;</p> <p>3 Diagram of the internal and external compositions</p> <p>4 State the importance of the lithosphere</p>	<p>Inclusive and differentiated learning Individual seat work or mixed groups according to gender, abilities, learning styles, etc</p> <ol style="list-style-type: none"> 1. Group discussion on the meaning and the composition of the lithosphere 2. Field trip outside the school compound to observe the land mass and differentiate lithosphere from the other layers of the earth such as water and air. 3. State the importance of lithosphere to life on planet earth 4. Learners draw diagram to illustrate the internal and external parts of the lithosphere. 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 C Map reading for west Africa Certificate Physical and Human Geography</p> <p>DISCOVER A-Z OF GEOGRAPHY WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Research and problem solving • Creative skill <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u> Fieldtrip Oral questions Assignments Quizzes' Tests</p>

SEMESTER TWO

GRADE: 10

PERIOD: VI

UNIT 1: PHYSICAL GEOGRAPHY—

TOPIC: BIOSPHERE

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to elaborate on the biosphere and its importance to man, plants and animals.	<p>upon completion of the topic, learners will:</p> <ol style="list-style-type: none"> 1. Explain the Biosphere and its composition 2. Discuss the importance of Biosphere as life layer of the earth. 3. Identify the various bio chores in the biosphere 4. Compare and contrast the biosphere to other natural features of the earth 	<ol style="list-style-type: none"> 1 Definition and composition of biosphere: <ol style="list-style-type: none"> a. forest b. swamps c. Deserts etc. 2 Identification and discussion on the various bio chores in the biosphere; 3 Discuss the importance of biosphere as life layer of the earth. 4 Diagram of the composition of the biosphere 5 Differentiate the aquatic bio cycle from the terrestrial bio cycle in the biosphere. 	<p>Inclusive and differentiated learning Individual seat work or mixed groups according to gender, abilities, learning styles, etc</p> <ol style="list-style-type: none"> 1 Learners brainstorm on the components of the biosphere using poster sheets 2 Group discussion on the composition of the biosphere 3 Field trip outside the school compound to observe the different plants and animals that make up the biosphere and differentiate it from the other layers of the earth. 4 Draw the aquatic and the terrestrial bio cycle in the biosphere and the other layers of the earth 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 C Map reading for west Africa Certificate Physical and Human Geography</p> <p>DISCOVER A-Z OF GEOGRAPHY WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Communication skills • Research skill • Creative skills <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u> Fieldtrip Oral questions Assignments Quizzes'</p>

SEMESTER ONE

GRADE: 11

PERIOD: 1

UNIT 1: PHYSICAL GEOGRAPGY—LAND FORMS RESULTING FROM

TOPIC 1: FAULTING AND FOLDING

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ ASSESSMENT
Learners are able to effectively describe faulting and folding	<p>UPON COMPLETION OF THE TOPIC, STUDENTS WILL</p> <ol style="list-style-type: none"> 1. . Discuss faulting and folding as forces that produce landforms 2. Differentiate between faulting and folding in relation to land formation. 3. Identify the major land forms resulting from faulting and folding 	<p>Faulting and Folding</p> <p>1) Fold Mountains</p> <ol style="list-style-type: none"> i) Formation of fold mountains ii) Importance of fold mountains <p>2 Block Mountains</p> <ol style="list-style-type: none"> a) Definition and Description b) Formation of Block Mountains c) Importance of Block Mountains i. Mineral deposits ii. Moderation of climate iii. Communication masts iv. Tourism, etc d) Disadvantages of Block Mountains 	<p><u>Inclusive and differentiated learning</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <p>1 Field trip: Organize field trips to observe various landforms in Liberia and make sketches of the landforms they observe.</p> <p>2. Assessment: Learners research and report on the location of Fold Mountains, Volcanic Mountains, Residual Mountains and Block Mountains on the world physical maps.</p> <p>4 Class discussion/brainstorm: the economic importance of landforms and the formation of a) fold mountain and b) block mountain</p>	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 C Map reading for west Africa Certificate Physical and Human Geography</p> <p>DISCOVER A-Z OF GEOGRAPGY WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Research skills • Effective communication skills • Creative skills <p><u>ASSESSMENT STRATEGIES That can be used to check competencies. Select relevant options</u></p> <p>Field report Oral questions Assignments Quizzes'</p>

SEMESTER ONE

GRADE: 11
 PERIOD: 1
 UNIT 1: PHYSICAL GEOGRAPGY—LAND FORMS RESULTING FROM
 TOPIC 11: VULCANICITY

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ ASSESSMENT
Learners are able to explain the term vulcanicity and identify features produced as the results of volcanicity	<p>UPON COMPLETION OF THE TOPIC, STUDENTS WIL:</p> <ol style="list-style-type: none"> 1. Explain the term 'Vulcanicity' 2. Identify the causes of volcanicity 3. Describe the features produced by volcanic action 4. Discuss the effects of volcanicity and earthquake 	<p>Vulcanicity</p> <ol style="list-style-type: none"> i) Definition and terms ii) Causes <p>Volcanicity and Features produced</p> <ol style="list-style-type: none"> i) Intrusive: Batholiths, dykes, Skills, Laccoliths, Geysers, etc. ii) Extrusive: Composite cone, ash and cinder cone, lava plateau, lava plain, crater, caldera, etc. <p>Positive effects of volcanicity and earthquake: Tourist attraction, mineral deposits, fertile soils</p>	<p><u>Inclusive and differentiated learning</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <ol style="list-style-type: none"> 1. Group discussion: on the ways in which volcanicity and earthquake affect the population; identify regions that are affected by volcanic eruption and earthquake; the economic importance of earthquakes and volcanic landforms 2. Classwork/assignment: Draw diagram indicating the formation of volcanic features. 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 C Map reading for west Africa Certificate Physical and Human Geography</p> <p>DISCOVER A-Z OF GEOGRAPGY WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Effective communication skills • Creative skills <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <p>Oral questions Assignments Quiz</p>

SEMESTER ONE

GRADE: 11
 PERIOD: 1
 UNIT 1: PHYSICAL GEOGRAPGY—
 TOPIC 111: HYDROSPHERE

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ ASSESSMENT
Learners are able to elaborate on the term hydrosphere and its composition and characteristics	<p>upon completion of the topic, students will:</p> <ol style="list-style-type: none"> 1. . Explain the term hydrosphere 2. Summary the characteristics of hydrosphere 3. Identify the composition of hydrosphere 4. Discuss the importance of hydrosphere to man 	<p>Hydrosphere: a) Definition b) Characteristics and composition c) Importance of the hydrosphere d) Problems and solutions</p>	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc. <u>Activities</u> 1. Group discussion on the components of the hydrosphere, their importance to the sustenance of life;State the economic importance of the hydrosphere. 2. Field trip for learners to observe and see the different components of the hydrosphere (lakes, seas, oceans, and clouds) 3 Class work/Homework: Draw diagram to display components of the hydrosphere</p>	<p>A. Primary Text General Geography in Diagrams (Pearson) B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1; Map reading for west Africa Certificate Physical and Human Geography. DISCOVER A-Z OF GEOGRAPGY WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Effective communication skills • Creative skills • Research skills <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <p>Fieldtrip Oral questions Assignments Quiz</p>

SEMESTER ONE

GRADE: 11
 PERIOD: 1
 UNIT 1: PHYSICAL GEOGRAPGY—
 TOPIC IV: LITHOSPHERE

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to explain the term lithosphere and summarize its composition and characteristics as well as relate its importance to man	<p>upon completion of the topic, students will:</p> <ol style="list-style-type: none"> 1. Describe the term Lithosphere 2. Outline the characteristics of Lithosphere 3. Identify the composition of Lithosphere 4. Relate the importance of Lithosphere to man 	<p>Lithosphere:</p> <ol style="list-style-type: none"> a) Definitions b) Characteristics and composition c) Importance of the lithosphere d) Problems and solutions 	<p><u>Inclusive and differentiated learning</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <ol style="list-style-type: none"> 1. Group discussion on the composition of the lithosphere and its importance to the sustenance of life 2. Field trip for learners to see the mountains, rocks and the crust of the earth. 3. Class work/homework: learners outline the external structure of the lithosphere; identify ways by which lithosphere supports life 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>C. Other resources</p> <p>Map reading for west Africa Certificate Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY , WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Effective communication skills • Research skills <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies. Select relevant options</u></p> <p>Field report Oral questions Assignments Quizzes'</p>

SEMESTER ONE

GRADE: 11

PERIOD: II

UNIT 1: PHYSICAL GEOGRAPGY—

TOPIC 1: BIOSPHER

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to recognize the biosphere as the life layer of the earth	<p>UPON COMPLETION OF THE TOPIC, STUDENTS WILL:</p> <ol style="list-style-type: none"> 1. Discuss Biosphere and its composition 2. Outline the importance of Biosphere as life layer of the earth 3. Identify the various bio chores in the biosphere 4. 4 Relate the biosphere to other natural features of the earth 	<p>Biosphere</p> <ol style="list-style-type: none"> 1. Definition 2. composition: <ol style="list-style-type: none"> d. forest e. swamps f. Deserts etc. 3. Identification of the various bio chores in the biosphere; 4. Importance of biosphere as life layer of the earth. 5. Diagram of the composition of the biosphere 6. Differentiate the aquatic bio cycle from the terrestrial bio cycle in the biosphere. 	<p><u>Inclusive and differentiated learning</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <ol style="list-style-type: none"> 1. Class exercise: Learners List the components of the biosphere using poster sheets 2. Group discussion on the meaning and the composition of the biosphere 3. Field trip outside the school compound to observe and to differentiate the biosphere from the other layers of the earth. 4. Home work: Draw the aquatic and the terrestrial bio cycle 5. Demonstrate the relationships between the biosphere and the other layers of the earth 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>C. Other Resources Map reading for west Africa, Certificate Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY, WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Communication skills • Research skill • Creative skills <p><u>ASSESSMENT STRATEGIES</u></p> <p><u>That can be used to check competencies. Select relevant options</u></p> <p>Fieldtrip Oral questions Assignments Quiz</p>

SEMESTER ONE

GRADE: 11
 PERIOD: II
 UNIT 1: PHYSICAL GEOGRAPGY—
 TOPIC 11: ATMOSPHERE

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to elaborate on the atmosphere, its characteristics and usefulness	UPON COMPLETION OF THE TOPIC, LEARNERS WILL: <ol style="list-style-type: none"> 1. . Elaborate on the Atmosphere and its composition. 2. Outline the layers of the atmosphere and their characteristics. 3. Discuss the usefulness of the atmosphere 4. Identify atmospheric pollution 5. List methods of protecting the atmosphere 	1 Atmosphere <ol style="list-style-type: none"> a) Definition of atmosphere b) Characteristics and composition c) Importance of the atmosphere d) Problems and solution 	Inclusive and differentiated learning Individual seat work or mixed groups according to gender, abilities, learning styles, etc. Activities 1.Class exercise: List the composition and layers of the atmosphere using poster sheets 2 Group discussion on the meaning and usefulness of the atmosphere 3.Group work: Research on the causes of atmospheric pollution and ways to minimize pollution 4 Draw the atmosphere showing the different layers	A. Primary Text General Geography in Diagrams (Pearson) B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 C Map reading for west Africa Certificate Physical and Human Geography C. other resources DISCOVER A-Z OF GEOGRAPGY, WASSCE Q & A (PAPER 1 &2)	<u>EXPECTED COMPETENCIES</u> <ul style="list-style-type: none"> • Communication skills • Research skill • Creative skills <u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies. Select relevant options</u> Oral questions Assignments Quizzes’

SEMESTER ONE

GRADE: 11
 PERIOD: II
 UNIT 1: PHYSICAL GEOGRAPGY—
 TOPIC 111: ATMOSPHERIC PRESSURE AND AIR POLLUTION IN LIBERIA

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to explain atmospheric pressure and air pollution in Liberia	<p>upon completion of the topic, students will:</p> <ol style="list-style-type: none"> 1. Explain Atmospheric pressure. 2. Discuss the types of wind on the basis of temperature variation. 3. Explain air pollution 4. Outline the causes and impact of air pollution in Liberia 	<p>1. Atmospheric Pressure</p> <ol style="list-style-type: none"> i) Definition ii) Temperature variation as a result of a) wind direction and speed b) pressure belts c) zone of convergence and divergence. iii). Planetary wind system. iv). Deflection of winds. v). Land and sea breezes. vi). Warm and cool/cold air. vii). Currents, shape of coastline etc. <p>2 Definition of air pollution a).causes b).effects c).control.</p> <p>3. Case study: Air pollution in Liberia.</p>	<p>Inclusive and differentiated learning Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <ol style="list-style-type: none"> 1. Class work: Draw a barometer on poster sheet and explain its usage; 2. Home work: Outline the different types of winds on the basis of temperature variation; 3. Group work: Learners research and report on some causes of air pollution in Liberia 4. Group discussion/Brainstorm on the control of air pollution, outline the causes of wind 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>C. Other materials</p> <p>Map reading for west Africa, Certificate Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY, WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Communication skills • Research skill • Creative skills <p><u>ASSESSMENT STRATEGIES</u></p> <p><u>That can be used to check competencies. Select relevant options</u></p> <p>Fieldtrip Oral questions Assignments Quizzes'</p>

SEMESTER ONE

GRADE: 11

PERIOD: III

UNIT 1: PHYSICAL GEOGRAPGY—

TOPIC: EFFECTS OF CLIMATIC ELLEMENTS

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ ASSESSMENT
Learners are able to differentiate between weather and climate and analyze climatic data	<p>UPON COMPLETION OF THE TOPIC, LEARNERS WILL:</p> <ol style="list-style-type: none"> Differentiate between Weather and Climate List the elements of weather and climate Calculate and analyze climatic data using chart 	<ol style="list-style-type: none"> Definition of climatic elements: Differences between weather and climate. Discuss the elements of weather and climate: Draw a temperature and rainfall graph using weather instruments: <ol style="list-style-type: none"> Bar chart and graph Histogram graph Pie chart, etc. Name the instruments that measure elements of weather and climate. 	<p>Inclusive and differentiated learning Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <ol style="list-style-type: none"> Class Discussion: group learners to discuss the causes of weather and climatic changes; and state the importance of climate Group presentation on the weather instruments and their uses. Class exercise: Prepare a climatic chart and calculate the mean annual temperature, mean monthly temperature, range of rainfall and temperature, etc. Field trip outdoor to feel and observe changes in the weather condition. 	<ol style="list-style-type: none"> Primary Text General Geography in Diagrams (Pearson) Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 C Map reading for west Africa Certificate Physical and Human Geography Other resources DISCOVER A-Z OF GEOGRAPGY, WASSCE Q & A (PAPER 1 &2) 	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> Communication skills Research and problem solving skill <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <p>Fieldtrip Oral questions Assignments Quiz</p>

SEMESTER TWO

GRADE: 11

PERIOD: IV

UNIT 1: PHYSICAL GEOGRAPGY—WEATHER AND CLIMATE

TOPIC: NATURAL VEGETATION AND HUMAN ECONOMIC ACTIVITY

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ ASSESSMENT
Learners are able to discuss vegetation and the related economic activities in Liberia	<p>UPON COMPLETION OF THE TOPIC, LEARNERS WILL:</p> <ol style="list-style-type: none"> 1. Discuss vegetation 2. List the different types of natural vegetation 3. Summarize the factors that affect vegetation. 4. Outline the economic activities in Liberia that are related to the natural vegetation 	<ol style="list-style-type: none"> 1. Natural Vegetation Definition and Types 2 Development of vegetation: <ol style="list-style-type: none"> a) Climatic, b) Biotic, c) Soil, etc. 3. Human Economic Activities <ol style="list-style-type: none"> a)Primary b) Secondary c) Problems And Solutions 4. Case Study: Liberia (Forest, Mountain, Savanna, Mangrove Swamps and Marshlands). 	<p><u>Inclusive and differentiated learning</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <ol style="list-style-type: none"> 1.Class Discussion/Brainstorm: Define vegetation and relate it to climate;Name some human economic activities that affect the natural vegetation 2.Field trip with learners to show the various species of plants; 3.Home work: Outline the various types of natural and cultivated vegetation;learners do research and report on methods used in deforestation, afforestation and reforestation 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 C. Other resources</p> <p>Map reading for west Africa Certificate Physical and Human Geography</p> <p>DISCOVER A-Z OF GEOGRAPGY</p> <p>WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Organizational ability skills • Research and problem solving skill <p><u>ASSESSMENT STRATEGIES That can be used to check competencies. Select relevant options</u></p> <p>Fieldtrip Oral questions Assignments Quizzes'</p>

SEMESTER TWO

GRADE: 11
 PERIOD: IV
 UNIT 2: HUMAN GEOGRAPGY—PRIMARY INDUSTRY
 TOPIC: AGRICULTURE

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to discuss agriculture and systems of farming as well as outline factors affecting agriculture	UPON COMPLETION OF THE TOPIC, LEARNERS WILL: <ol style="list-style-type: none"> 1. Outline primary industries 2. Identify factors affecting the development of primary industries 3. Discuss agriculture as a primary industry 4. Classify agriculture according to type 5. Compare the systems of farming 6. Explain the factors that affect agriculture and their importance 	<ol style="list-style-type: none"> 1. Definition of Primary Industries 2. Major Primary Industries <ol style="list-style-type: none"> i) Agriculture: <ol style="list-style-type: none"> a) Subsistence and Commercial b) Crop and Animal Farming ii) Systems Of Farming : <ol style="list-style-type: none"> a) Shifting cultivation). b) Bush fallowing c) Mechanized farming d) Crop rotation e) Truck farming f) Pastoralism, Nomadism, Dairy farming, etc. iii) Problems Affecting Agriculture. 	<p><u>Inclusive and differentiated learning</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <ol style="list-style-type: none"> 1 Class discussion: Learners define agriculture and relate it to primary industry. 2 Group work and debate on mechanize and subsistence farming in Liberia(boys vs girls) 3 Field trip for learners to observe farming sites. 4.Homework: Distinguish between intensive and extensive farming; outline the different farming methods in agriculture 5. Learners do research and report on why agriculture is a primary industry. 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>C. Other resources Map reading for west Africa, Certificate Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY, WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Organizational ability skills • Research and problem solving skill • Effective communication <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <p>Fieldtrip Oral questions Assignments Quizzes'</p>

SEMESTER TWO

GRADE: 11
 PERIOD: IV
 UNIT 2: HUMAN GEOGRAPGY—PRIMARY INDUSTRY
 TOPIC: FISHING

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ ASSESSMENT
Learners are able to explain fishing and its importance as well as outline conditions that favor fishing.	<p>upon completion of the topic, learners will:</p> <ol style="list-style-type: none"> 1. 1 Locate the major fishing grounds in the world 2. List the local and international methods of fishing 3. Explain conditions that favor fishing 4. 4. Discuss the importance of fishing 	<p>Fishing</p> <p>i) Major Fishing Grounds:</p> <ol style="list-style-type: none"> a) The Grand Banks b) The coast of Peru c) The Sea of Japan etc. <p>ii) Methods of Fishing:</p> <ol style="list-style-type: none"> a) Hook and line b) The use of nets c) The use of wicker baskets, etc. <p>iii) Conditions that Favor Fishing</p> <ol style="list-style-type: none"> a) Meeting of warm and cool ocean currents b) Abundance of plankton, etc. <p>iv) Importance of Fishing</p> <ol style="list-style-type: none"> d) Problems and solutions e) Case study v) Fishing in west Africa 	<p><u>Inclusive and differentiated learning</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <ol style="list-style-type: none"> 1. Class discussion: Define fishing and relate it to primary industry; State the importance of the fishing industry to the development of mankind; Outline conditions that favor fishing in Liberia 2. Home work: Outline the major fishing ground in the World. 3. Group work and presentation on the methods of fishing (boys vs girls) 4. Field trip for learners to observe major breeding sites and fishing grounds in and around the community. 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>C. Other resources Map reading for west Africa, Certificate Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY, WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Organizational ability skills • Research and problem solving skill • Effective communication <p><u>ASSESSMENT STRATEGIES That can be used to check competencies. Select relevant options</u></p> <p>Fieldtrip Oral questions Assignments Quizzes'</p>

SEMESTER TWO

GRADE: 11

PERIOD: IV

UNIT 2: HUMAN GEOGRAPGY—PRIMARY INDUSTRY

TOPIC: MINING

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to discuss mining and relate the importance of mining to national development	<p>UPON COMPLETION OF THE TOPIC, LEARNERS WILL:</p> <ol style="list-style-type: none"> 1. Explain mining 2. Classify the different types of minerals 3. Identify the major mineral producing countries of the world 4. Outline the uses of major minerals in the world 5. Analyze the importance of mining to national economies 6. Discuss some of the problems facing the mining industry in Liberia and other West African states 	<p>1. Mining i) Definition ii) Types of Minerals: a) Metallic (Ferrous and Non Ferrous) b) Non-Metallic c) Mineral Fuels iii) Uses of Selected Minerals: iv) Methods of Mining: a) Open Pit or Open Cast b) Adit c) Shaft or underground dredging d) Drilling v) Importance of the Mining Industry g) Infrastructural development, etc. vi) Problems and Solutions vii) Case Studies: a) Iron ore mining in Liberia b) Gold mining in Ghana and South Africa. c) Oil mining in the Delta</p>	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc. <u>Activities</u></p> <ol style="list-style-type: none"> 2. Group work: Learners in a group use appropriate chart/pictures, to classify the different types of mineral resources; Group learners to outline the advantages and disadvantages of the mining industries in Liberia. 3. Class discussion: Outline the minerals that are extracted in Liberia 4. Field trip to a mining site to see how minerals are extracted from the ground. 5. 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>C. Other resources Map reading for west Africa, Certificate Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Organizational ability skills • Research and problem solving skill • Effective communication • Creative skills <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies. Select relevant options</u></p> <p>Fieldtrip Oral questions Assignments Quizzes'</p>

		Region of Nigeria. d) Copper mining in the Katanga Region of Congo DR	3.Home work: Draw the map of the World and locate the major mineral producing countries	WASSCE Q & A (PAPER 1 &2)	
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SEMESTER TWO

GRADE: 11
 PERIOD: IV
 UNIT 2: HUMAN GEOGRAPGY—PRIMARY INDUSTRY
 TOPIC: LUMBERING

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to discuss lumbering with emphasis on the economic values of tree species and provide solution to lumbering related problems	<p>upon completion of the topic, learners will:</p> <ol style="list-style-type: none"> 1. Explain lumbering 2. Classify the different methods of lumbering base on the type of forest 3. List the choice trees in lumbering. 4. Outline the factors affecting lumbering in Liberia and elsewhere 5. Discuss the importance of lumbering 6. Recommend solutions to the problems facing lumbering in Liberia 	<p>Lumbering: i) Definition ii) Methods of exploitation: iii) Factors affecting lumbering: v) Importance Of Lumbering: a) Provision of jobs b) Construction c) Foreign exchange earner etc. vi) Problems And Solutions vii)Case Studies: a) Lumbering in Liberia b) Lumbering in the Congo Basin of Central Africa. c) Lumbering in West Africa</p>	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc. <u>Activities</u> 1. Demonstration/Class exercise: Learners observe pictures/illustrations of lumbering activities, and report on the methods of lumbering 2 Class discussions: Learners provide information on methods of exploitation and factors affecting these. 3. Illustrations, let learners identify the types and species of plants in lumbering. 4. Field visit to a Saw Mill for students to observe the activities, and write a report on the activities of the mill. 5 Case study: lumbering in Liberia</p>	<p>A. Primary Text: General Geography in Diagrams (Pearson) B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 C. Other resources Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY, WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPENTENCIES</u></p> <ul style="list-style-type: none"> • Organizational ability skills • Research and problem solving skill • Effective communication • Creative skills <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <p>Fieldtrip Oral questions Assignments Quizzes'</p>

SEMESTER TWO

GRADE: 11

PERIOD: V

UNIT 2: HUMAN GEOGRAPGY—THE WORK OF MAN

TOPIC: SECONDARY AND TERTIARY INDUSTRIES

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to categorize industries as well as elaborate on the economic importance of industries in Liberia	<p>upon completion of the topic, learners will:</p> <p>Categorize secondary industries</p> <p>2. List the factors that affect the location of manufacturing industries</p> <p>3. Examine the impact of manufacturing industries on the health of communities.</p> <p>4. Emphasize the role of secondary industries in industrial development.</p> <p>5. Classify manufacturing industries and briefly describe each class.</p> <p>6. Discuss the categories of tertiary industries</p>	<p>1 Manufacturing:</p> <p>i) Definition,</p> <p>ii) Classification,</p> <p>iii) Major Industrial Regions.</p> <p>iv) Factors affecting the location of manufacturing industries,</p> <p>v) Importance of Manufacturing Industries:, etc.</p> <p>vi) vi) Problems Facing Manufacturing Industries:</p> <p>2. Trade and Commerce. Definition and types Internal, and External ii.</p> <p>Transport and Development: i. Definition ii. Means of Transport</p>	<p><u>Inclusive and differentiated learning</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p>Activities</p> <p>1. Field trips and excursions to selected factory/plants in Liberia for learners to observe manufacturing processes and write report on industrial activities.</p> <p>2 Group discussion on the negative and positive impacts of manufacturing industries; indicate the various types of manufacturing industries and clearly explain their functions.</p> <p>3 Home work: List factors that influence the location and development of manufacturing industries;</p>	<p>A. Primary Text: General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>C. Other resources</p> <p>Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY, WASSCE Q & A(PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Organizational ability skills • Research and problem solving skill • Effective communication • Creative skills <p><u>ASSESSMENT STRATEGIES</u></p> <p><u>That can be used to check competencies.</u></p> <p><u>Select relevant options</u></p> <p>Fieldtrip Oral questions Assignments Quiz Group presentation Tests</p>

SEMESTER TWO

GRADE: 11

PERIOD: V

UNIT 2: HUMAN GEOGRAPGY—SECONDARY INDUSTRIES

TOPIC: SOURCES OF ENERGY, LOCATION AND DISTRIBUTION

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to identify and classify sources of energy, and state their importance to economic development.	<p>UPON COMPLETION OF THE TOPIC, LEARNERS WILL:</p> <ol style="list-style-type: none"> 1. Classify the different sources of energy 2. Explain the forms of energy 3. Analyze the factors affecting sources of energy 	<p>1. Sources of Energy: Classification: a) Renewable, and b) Non Renewable</p> <p>2. Forms of Energy: Mineral Fuels (Fossil Fuels): E.g. Coal, Natural Gas, Petroleum and Uranium.</p> <p>3. Location and Distribution Power Sources: Eg. Hydro _ Electric Power _ Rivers, Waterfalls, Dams Etc. a) Solar – Sunlight b) Wind c) Tidal d) Geothermal e) Underground f) Biomass - Organic Organisms</p> <p>4. Factors Affecting Sources of energy a) Capital, b) Technology, c) Climate, Etc.</p>	<p><u>Inclusive and differentiated learning</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <ol style="list-style-type: none"> 1. Class discussion: Outline the source of energy and state the categories or forms of energy; c 2. Home work: differentiate between renewable and non-renewable energy; Outline the factors affecting the sources of energy 3. Field trip out door in the community as well as, to a hydro-electric plant to identify sources of solar and electrical energy; 4. Group work: learners carry out research and report on the application of energy to the industrial activities. 	<p>A. Primary Text:</p> <p>General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts: Abegunde, et al. Senior Secondary Geography Bk.</p> <p>C. Other resources</p> <p>Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY, WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Research and problem solving skill • Effective communication <p><u>ASSESSMENT STRATEGIES</u></p> <p><u>That can be used to check competencies. Select relevant options</u></p> <p>Fieldtrip Oral questions Assignments Quiz Group presentation, Tests</p>

SEMESTER TWO

GRADE: 11
 PERIOD: VI
 UNIT 2: PRACTICAL GEOGRAPHY—MAP READING
 TOPIC: PRINCIPLES OF GEOGRAPHIC INVESTIGATION

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
<p>Learners are able to:</p> <p>analyze map information and reshape distances on maps;</p> <p>locate positions on the earth using grid system as well as calculate the gradient of slope</p>	<p>UPON COMPLETION OF THE TOPIC, LEARNERS WILL:</p> <ol style="list-style-type: none"> 1. Analyze map information 2. Distinguish various kinds of maps 3. Apply map scales to reduce, enlarge, and calculate areas and ground distances of maps 4. Calculate the gradient of slopes 5. Convert from one scale to another 6. Discover the positions of places using the grid system, or longitudes and latitudes 7. Detect directions using the compass and bearing 8. Design diagrams, profiles and sketches resulting from survey exercises 	<ol style="list-style-type: none"> 1 Map – A Definition 2. Map Characteristics 3. Types of Maps: 4. Importance/Uses of Maps: 5. Limitations of Maps 6. Definition of Map Scale 7. Types of Map Scales: Characteristics of each type of Scale 8. Conversion of Map Scales 	<p><u>Inclusive and differentiated learning</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <ol style="list-style-type: none"> 1 .Class Discussion: Outline the kinds of map and indicate their characteristics 2 Home work/class exercise: Draw map to scale, reduce and enlarge maps and practice the uses of rulers, protractors; Draw the prismatic compass and illustrate its direction and bearing 4.Group work:group students to survey the school compound or playground and prepare a sketch draft of the survey 	<p>A. Primary Text: General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts:Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>C. Other resources Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY, WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Research and problem solving skill • Creative skills • Effective communication <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies. Select relevant options</u></p> <p>Fieldtrip Oral questions Assignments Quiz Group presentation Tests</p>

SEMESTER TWO

GRADE: 11
 PERIOD: VI
 UNIT 2: PRACTICAL GEOGRAPHY—MAP READING
 TOPIC: STATISTICAL MAPS AND DIAGRAMS

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
<p>Learners are able to translate statistical information into diagrams and graphs</p>	<p>UPON COMPLETION OF THE TOPIC, LEARNERS WILL:</p> <ol style="list-style-type: none"> 1. 1 Discuss the sources of statistical data 2. Design different kinds of graphs based on statistical data 3. Explain the advantages and disadvantages of the various kinds of graphs 	<p>1 Sources of Statistical Data. 2. The Use of Statistics and Diagrams. 3. Limitations of Statistics 4.Tabulation of Statistics 5. Graphical Representation of Statistics line graph) • Advantages and Disadvantages • Bar graphs (histograms, simple bar graph, divergent bar graphs, and percentage bar graphs). • Circle graphs (pie charts, proportional pie charts, and proportional circles). • Advantages and Disadvantages</p>	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc. <u>Activities</u> 1 .Group work/Survey: Group work on the collection and presentation of statistical data on both the bar and pie charts (boys vs girls) 2 Home work/assignment: Outline the importance of statistical data in map reading 3.Class discussion/exercise: State the differences among statistics, diagrams and graphs; outline the advantages and disadvantages of statistics and graphs</p>	<p>A.General Geography in Diagrams (Pearson) B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 C. Other resources Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY,WASS CE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPENTENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Research and problem solving skill • Effective communication <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <p>Survey report Oral questions Assignments Quiz Group presentation Tests</p>

SEMESTER ONE

GRADE: 12

PERIOD: 1

UNIT 2: PRACTICAL GEOGRAPHY—MAP READING

TOPIC 1: Kinds of maps and their uses

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to analyze map information and convert, between map scales	<p>UPON COMPLETION OF THE TOPIC, LEARNERS WILL:</p> <ol style="list-style-type: none"> 1. Explain map information 2. Distinguish between the various kinds of maps 3. Apply map scales to reduce, enlarge, and calculate areas and ground distances 4. Convert from one map scale to another 	<ol style="list-style-type: none"> 1. Map – A Definition 2. Map Characteristics 3. Types of Maps: Road maps, Weather maps, Atlases, Topographical maps etc 4. Importance/Uses of Maps: a) Give information b) Identify landscape c) Interpret landscape d) Find directions and positions e) Find distances, 5. Limitations of Maps (proportional circles). Definition of Map Scale. 6. Types of Map Scales: 	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <ol style="list-style-type: none"> 1. Group work: Draw maps to scale. b) Reduce and enlarge maps and Scales. c) Practice the uses of rulers, protractors and strings. 2. Group discussion: Learners discuss the uses of maps 3. Field work: Field visit to the Department of cartography at the Ministry of Lands and Mines & Energy/LISGIS to observe the various types of map and their uses, and write a report on the result of the trip 4. Class exercise: convert from one map scale to another scale. 5. Home work: Draw linear scale using ruler 	<ol style="list-style-type: none"> A. General Geography in Diagrams (Pearson) B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 C. Other resources <p>Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPHY, WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Research and problem solving skill • Effective communication • Creative skills <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies. Select relevant options</u></p> <p>Fieldtrip Oral questions Assignments Quiz Group presentation Tests</p>

SEMESTER ONE

GRADE: 12
 PERIOD: 1
 UNIT 2: PRACTICAL GEOGRAPHY—MAP READING
 TOPIC 11: FINDING POSITIONS, DIRECTIONS AND USING CONVENTIONAL SIGNS AND SYMBOLS

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ ASSESSMENT
Learners are able to locate positions on the earth and recognize conventional signs and symbols	<p>UPON COMPLETION OF THE TOPIC, STUDENTS WILL BE ABLE TO:</p> <ol style="list-style-type: none"> 1. Detect positions using Latitudes 2. Apply the compass points and the Angular Bearings to show direction 3. Interpret conventional signs and symbols 4. Identify the types of signs and symbols 5. Explain the importance and uses of conventional signs and symbols 6. Outline the limitations of conventional signs and symbol 	<ol style="list-style-type: none"> 1. Locate Position using Latitudes. 2. Locate Position using Grid References 3. Direction: a) Using the compass points. b) Using the Angular Bearings c) Using the compass points and Bearings 4. Types of North: a) Magnetic b) True c) grid North 5. Definition of Conventional Signs and Symbols. 6. Types of Signs and Symbols: a) Point symbols b) Line symbols c) Literal symbols d) Pictorial symbols e) Color symbols 7. Importance and Uses of Conventional Signs and Symbols. 8. Limitation in the Use of Signs and Symbols. 	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p>Class exercise/Assignment: Draw grid map to show eastings and northings; divide learners into two groups (mixed) and let each group draw the sixteenth(16) intermediate points of the compass; use compass points and angular bearing to find directions of a structure from a given point on maps; Draw the types of conventional signs and symbols</p>	<p>A. Primary text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>C. Other resources Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY, WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Research and problem solving skill • Effective communication • Creative skills <p><u>ASSESSMENT STRATEGIES That can be used to check competencies. Select relevant options</u></p> <p>Oral questions Assignments Group presentation Quizzes, Tests</p>

SEMESTER ONE

GRADE: 12
 PERIOD: II
 UNIT 2: PRACTICAL GEOGRAPHY—MAP READING
 TOPIC 1: METHODS OF REPRESENTING RELIEF AND SIMPLE CONTOUR LANDFORMS;

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to explain contour and gradient as well as calculate gradient of slopes	<p>UPON COMPLETION OF THE TOPIC, LEARNERS WILL:</p> <ol style="list-style-type: none"> 1. Explain Contours 2. Distinguish the characteristic features of the different methods of showing relief on maps 3. Discuss the advantages and disadvantages of the different methods of showing relief 4. Identify the different contour landforms 5. Describe gradient 6. Calculate the gradient of slopes 	<p>1. Representation of relief 2. Contours Definition Slope: a) Concave b) Convex c) Steep, d) Gentle, etc 3. Contour Landforms: i. Plateau ii. Ridge iii. Valley iv. Spur, V). Col/ Sadd) vi). Pass/ Gap vii. Knoll, viii. Cuesta, 4 Gradient:i. Definition ii. Calculation of Gradient iii. Formula iv. Vertical Exaggeration v. Cross sectional Drawing vi. Framework, vii. Alignment, viii. Indivisibility, identification of terminal points, marking intervening contours, vertical scale, etc.</p>	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <ol style="list-style-type: none"> 1. Home work: Draw the different symbols used to show reliefs on maps. 2. Class discussion: learners discuss different types of slopes and the methods of calculating the gradients of slopes; 3 Group work: identify all the contour landforms; differentiate relief map from other types of map; 4. Class exercise/work: Using profile of cross-section, calculate the vertical exaggeration; 	<p>A. Primary Text General Geography in Diagrams (Pearson) B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 C. Other resources Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPHY, WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Creative skills <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <p>Oral questions Group presentation, Quizzes, Assignments, Tests</p>

SEMESTER ONE

GRADE: 12
 PERIOD: II
 UNIT 2: PRACTICAL AND REGIONAL GEOGRAPHY—MAP READING
 TOPIC 11: GRAPHICAL REPRESENTATION OF STATISTICAL DATA

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to discuss the sources of statistical data and design different kinds of graphs	<p>upon completion of the topic, learners will:</p> <ol style="list-style-type: none"> 1. Discuss the sources of statistical data 2. Design different kinds of graphs based on statistical data 3. Explain the advantages and disadvantages of the various kinds of graphs 	<ol style="list-style-type: none"> 1 Sources of Statistical Data. 2. The Use of Statistics and Diagrams. 3. Limitations of Statistics 4. Tabulation of Statistics 5. Graphical Representation of Statistics <ul style="list-style-type: none"> • Choice of scale • The use of squared- paper in representing statistical data 6.Types of graphs <ul style="list-style-type: none"> • Line graphs (simple line graph, combine line graph, and compound line graph) • Advantages and Disadvantages • Bar graphs (histograms, simple bar graph, divergent bar graphs, and percentage bar graphs). • Circle graphs (pie charts, proportional pie charts, and proportional circles). 	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc. <u>Activities</u></p> <ol style="list-style-type: none"> 1.Group discussion: Group learners (mixed) to discuss the difference between statistics and graphs and their uses;Learners discuss the advantages and disadvantages of graphs as statistical tools; 1. Class work: Draw the types of graphs on poster sheets; 3.Assignment: Group presentation on the sources of statistical data; 	<p>A. Primary Text General Geography in Diagrams (Pearson) B. Secondary TextsAbegunde, et al. Senior Secondary Geography Bk. 1 C. Other resources Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY, WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Creative skills • Research skills <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u> Oral questions Assignments Group presentation, Quizzes Tests</p>

SEMESTER ONE

GRADE: 12
 PERIOD: II
 UNIT 2: PRACTICAL AND REGIONAL GEOGRAPHY—MAP READING
 TOPIC 111: DRAINAGE AND RIVER BASINS

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to classify drainage patterns and explain the influence it has on settlement and communication	<p>UPON COMPLETION OF THE TOPIC, LEARNERS WILL:</p> <ol style="list-style-type: none"> 1. Describe drainage and drainage systems 2. Classify the types of drainage patterns 3. Explain the influence of drainage on settlement and communication 	<ol style="list-style-type: none"> 1. Definition of Drainage 2. Drainage Systems <ul style="list-style-type: none"> • Island drainage, • River capture, etc 3. Types of Drainage Patterns <ul style="list-style-type: none"> • Dendrite • Trellis, • Radial, etc – 4. River Profile <ul style="list-style-type: none"> • Upper course • Middle course, • Lower course 5. Influence of Drainage on Settlement 6. Influence of Drainage on Communication 	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u> 1. Group discussion: <i>Group learners (mixed) to discuss drainage and its systems;</i> distinguish between natural and artificial drainage, and state the economic importance; 2. Home work/Class work: Learners draw a diagram of the different drainage patterns; 3. Brainstorm: Learners brainstorm and relate drainage to activities in settlements.</p>	<p>A. Primary Text General Geography in Diagrams (Pearson) B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 C. Other resources Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPHY WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Creative skills • Research skills <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u> Oral questions Assignments Group presentation Quizzes Tests</p>

SEMESTER ONE

GRADE: 12
 PERIOD: III
 UNIT 2: PRACTICAL AND REGIONAL GEOGRAPHY—MAP READING
 TOPIC 1: ELEMENTARY SURVEYING

LEARNING OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ ASSESSMENT
Learners are able to demonstrate skills and techniques to conduct survey	<p>Upon completion of the topic, learners will:</p> <ol style="list-style-type: none"> 1. Identify the instruments used by surveyors in surveying. 2. Demonstrate skills and techniques of survey on the field. 3. Design diagrams, profiles and sketches resulting from survey exercises. 4. Identify obstacles in ranging and chaining 5. Explain the different methods of survey Outline the advantages and disadvantages of the different survey methods	<ol style="list-style-type: none"> 1 Definition of Survey 2. Description and uses of Chain Survey Equipment 3. Types of Traverse surveying: Closed traverse Open traverse 2. Methods of Traverse surveying: 3. Advantages and disadvantages of survey methods 	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc. <u>Activities</u></p> <ol style="list-style-type: none"> 1.Group discussion: Group learners to discuss the different survey instruments and their uses; State the advantages and disadvantages of the different methods of survey; Learners discuss and relate drainage to activities in settlements 2.Group exercise on survey field work and prepare chart from information gathered from survey field work; 3. Assignment: Learners draw a diagram of the different drainage patterns 	<p>A. Primary Text General Geography in Diagrams (Pearson) B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1 C. Other resources Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Creative skills • Digital skill <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <p>Field survey report Oral questions Assignments</p>

SEMESTER ONE

GRADE: 12
 PERIOD: III
 UNIT 2: PRACTICAL AND REGIONAL GEOGRAPHY—MAP READING
 TOPIC 11: BASIC CONCEPT OF GIS

1.

LEARNING OUTCOMES	LEARNING OBJECTIVES:	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to elaborate on the Geographic Information System	<p>UPON COMPLETION OF THE TOPIC, LEARNERS WILL:</p> <ol style="list-style-type: none"> 1. Explain Geographic Information System (GIS) 2. Outline the sources of geographical data 3. Discuss the importance of geographical data and the GIS 4. Examine the components of GIS 5. Describe the procedure of GIS 6. Explain the relationship between GIS and remote sensing 	<ol style="list-style-type: none"> 1 Meaning of Geographic Information System (GIS). 2 Geographic Data 3 Sources of GIS: 4 Importance of Geographic Data and The GIS 5 Components of GIS Hardware And Software : 6 Procedures: 7 Satellite Remote Sensing - Definition of Concepts 8 GIS Implementation 	<p><u>Inclusive and differentiated learning</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc. <u>Activities</u> Class discussion/Exercise/assignment: Group learners to discuss GIS, Name the components of GIS hardware and software and the procedures of GIS;Learners explain the relationship between GIS and Remote Sensing; Learners outline the importance of GIS as a source of geographic information.</p>	<p>A.Primary Text General Geography in Diagrams (Pearson) B. Secondary TextsAbegunde, et al. Senior Secondary Geography Bk. 1 C. Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY, WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPETENCIE S</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Digital skill <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies. Select relevant options</u></p> <p>Oral questions Assignments Quizzes’ Tests Group presentation</p>

SEMESTER TWO

GRADE: 12
 PERIOD: IV
 UNIT 2: HUMAN AND REGIONAL GEOGRAPHY OF LIBERIA AND AFRICA
 TOPIC: **LIBERIA**

LEARNING OUTCOMES	LEARNING OBJECTIVES:	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to describe Liberia in terms of vegetation, size, soil types and settlement.	<p>UPON COMPLETION OF THE TOPIC, LEARNERS WILL:</p> <p>Discuss climate and the factors that affect climate</p> <p>2. List the vegetation zones of Liberia and factors that affect vegetation</p> <p>3. Classify soil types of Liberia</p> <p>4. Outline the causes of soil erosion</p> <p>5. Compare the settlement pattern of Liberia</p> <p>6. Describe the five geographical regions of Liberia</p> <p>7. Outline the location and size of Liberia</p>	<p>Location, Position and Size of Liberia</p> <p>Relief of Liberia</p> <p>Drainage and lakes</p> <p>Climate of Liberia</p> <p>i activities.</p> <p>Natural Vegetation of Liberia</p> <p>Soils of Liberia</p> <p>i. Soil types</p> <p>ii. soil erosion</p> <p>Population and Settlement</p>	<p><u>INCLUSIVE AND DIFFERENTIATED LEARNING</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <p>1. Class work/Exercise: learners discuss the location, position and size of Liberia using appropriate map; Outline and discuss the natural features of Liberia; Discuss the size, distribution and majority of the population of Liberia</p> <p>2. Assignment: Learners research and report on how erosion affects population and settlement in Liberia.</p>	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>C. Other Resources Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPHY WASSCE Q & A PAPER 1 & 2)</p>	<p><u>EXPECTED COMPETENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Creative skill • Research and problem solving <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies. Select relevant options</u></p> <p>Oral questions Assignments Quizzes' Tests Group presentation</p>

SEMESTER TWO

GRADE: 12
 PERIOD: IV
 UNIT 2: HUMAN AND REGIONAL GEOGRAPHY OF AFRICA
 TOPIC: WEST, EAST, NORTH, SOUTH AND CENTRAL AFRICA

1.

LEARNING OUTCOMES	LEARNING OBJECTIVES:	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to outline the geo-political regions of Africa, identify the territorial boundaries and distinguish the natural features	<p>UPON COMPLETION OF THIS TOPIC, LEARNERS WILL:</p> <p>Discuss the countries, size and the political boundaries of the various regions of Africa</p> <p>2. Examine the physical features and natural resources of the various African regions</p> <p>3. Discuss trade and communications relative to the population of the various regions</p> <p>4. Analyze factors influencing climate and agricultural activities of Africa</p>	<p>1 The Geography of West Africa:</p> <p>2 Geography of East Africa:</p> <p>3 Geography of Equatorial and Central Africa</p> <p>4. The geography of North Africa: activities.</p> <p>5. The Geography of Southern Africa</p>	<p><u>INCLUSIVE AND DIFFERENTIATED LEARNING</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <p>1. Class Discussion/Exercise: learners discuss the regions of Africa, the countries, size, and population of Africa with appropriate maps; outline and discuss the natural features of the various African regions;</p> <p>2. Group assignment: Learners research and report on how trade, agriculture and communication technology influence economic development of the various African regions</p>	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>C. Other resources Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPHY, WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPENTENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Creative skill • Research and problem solving <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <p>Oral questions Assignments Quizzes' Tests Group presentation</p>

SEMESTER TWO

GRADE: 12

PERIOD: V

UNIT 2: HUMAN AND REGIONAL GEOGRAPHY OF LIBERIA

TOPIC: PRIMARY AND TERTIARY INDUSTRIES OF LIBERIA

1

LEARNING OUTCOMES	LEARNING OBJECTIVES:	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to analyze the Liberian economy and recommend solutions to improve the economic system	<p>UPON COMPLETION OF THIS TOPIC, LEARNERS WILL:</p> <p>Differentiate the primary, secondary, and tertiary sectors of the economy of Liberia</p> <p>2. Discuss the importance of each sector to the economic and infrastructural development of Liberia</p> <p>3. Debate the problems hampering the growth and development of Liberia's economy.</p> <p>4. Recommend ways to improve the primary, secondary and tertiary industries of Liberia</p>	<p>1. Agriculture iCase Study: Rubber plantation in Liberia (Firestone Operations) Current trend and prospects</p> <p>2. Lumbering</p> <p>3. Fishing</p> <p>4. Trade and Commerce</p> <p>5. Transport and Development</p> <p>6. Tourism</p>	<p><u>INCLUSIVE AND DIFFERENTIATED LEARNING</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <p>1. Class discussion: learners discuss the three sectors of the Liberian economy;</p> <p>2. Group assignment: Group report on problems affecting economic growth and recommend possible solutions;</p> <p>3. Field trip /excursion: visit to industrial sites to observe activities and problems associated with production processes;</p> <p>4. Individual assignment: Learners research and report on the different industries and their production processes.</p>	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>C. Other resources Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPENTENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Research and problem solving <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies.</u> <u>Select relevant options</u></p> <p>Field report Oral questions Assignments Quizzes' Tests Group presentation</p>

SEMESTER TWO

GRADE: 12

PERIOD: V

UNIT 2:HUMAN AND REGIONAL GEOGRAPHY- WORLD POPULATION AND SETTLEMENT

TOPIC: **POPULATION AND SETTLEMENT**

LEARNING OUTCOMES	OBJECTIVES:	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
<p>Learners are able to:</p> <p>Describe the world population in relation to distribution and movements.</p> <p>Discuss settlement patterns and the consequences of migration.</p> <p>Adopt family planning as a means of population control</p>	<p>UPON COMPLETION OF THE TOPIC, LEARNERS WILL:</p> <p>1. Explain the concept of world population</p> <p>2. Describe population distribution patterns of the world.</p> <p>3. Distinguish between overpopulation and under population</p> <p>4. Outline factors which influence population movements</p> <p>4. Discuss why and how population census is conducted</p> <p>5. Identify the types of settlements and settlement patterns.</p> <p>6. Explain the consequences of migration at the source and receiving regions.</p> <p>7. Delineate family planning and empowerment</p>	<p>1. World Population – definition, distribution, factors affecting growth. Terms associated with population growth, etc.</p> <p>2. Settlement: definition; types, factors affecting settlement growth, settlement patterns and functions.</p> <p>3 Population control and family planning</p>	<p><u>INCLUSIVE AND DIFFERENTIATED LEARNING</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <p>1. Home work: Draw population maps indicating densely and sparsely population regions.</p> <p>2. Class Debate: Hold debate to discuss population control in relation to family planning and women empowerment.</p> <p>3. Class work: List some overpopulated and underpopulated countries.</p> <p>4. Field trip/exercise: to identify types of settlements, over and under-populated regions of Liberia.</p>	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Texts Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>C. Other resources Map reading for west Africa, Certificate, Physical and Human Geography</p>	<p><u>EXPECTED COMPENTENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Research and problem solving • Creative skills <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies. Select relevant options</u></p> <p>Field report Oral questions Assignments Quizzes’ Tests Group report .</p>

SEMESTER TWO

GRADE:: 12
 PERIOD V
 UNIT 2: PHYSICAL GEOGRAPHY-
 TOPIC: CLIMATE AND VEGETATION

LEARNING OUTCOMES	OBJECTIVES:	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY /ASSESSMENT
Learners are able to relate climate and vegetation as well as analyze climatic data	UPON COMPLETION OF THE TOPIC, LEARNERS WILL: <ol style="list-style-type: none"> 1. Differentiate between climate and vegetation 2. List the elements of weather and climate 3. 4. Analyze climatic data using chart 4. 5. Discuss the different types of natural vegetation 5. 6. Examine the factors that affect vegetation 	<ol style="list-style-type: none"> 1 Define climate and name its elements: 2 Differences between weather and climate. 3 Discuss the elements of weather and climate: 4 Preparation of climatic Chart. 5 Define Natural Vegetation 6 Factors affecting the development of vegetation: 7. Case Study: Liberia (Forest, Mountain, Savanna, Mangrove Swamps and Marshlands). 	<p><u>INCLUSIVE AND DIFFERENTIATED LEARNING</u> Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <ol style="list-style-type: none"> 1. Class discussion: the causes of weather and climate changes; importance of climate and vegetation; 2. Group work: Group presentation on the weather instruments and their uses. 3. Class work/exercise: Prepare a climatic chart and calculate the mean annual temperature, mean monthly temperature, range of rainfall and temperature, etc.. 4. Assignment: Learners do research and report on methods used in deforestation, afforestation and reforestation 5. Field trip: learners move outdoor to feel and observe changes in the weather condition. 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Text Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>C. Other resource Map reading for west Africa, Certificate, Physical and Human Geography, DISCOVER A-Z OF GEOGRAPGY, WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPENTENC IES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Research and problem solving • Creative skills <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies. Select relevant options</u></p> <p>Oral questions Assignments Quizzes? Tests</p>

SEMESTER TWO

GRADE: 12

PERIOD: VI

TOPIC: **GENERAL REVISION**

1. **MAP READING**
2. **PRIMARY, SECONDARY AND TERTIARY INDUSTRIES OF LIBERIA**
3. **CLIMATE AND NATURAL VEGETATION**
4. **REGIONAL GEOGRAPHY OF AFRICA**
5. **POPULATION AND SETTLEMENT**

OUTCOMES	LEARNING OBJECTIVES	CONTENTS	ACTIVITIES	MATERIALS	COMPETENCY/ASSESSMENT
Learners are able to demonstrate understanding of Geographic related topics	<p>UPON COMPLETION OF THIS REVIEW, LEARNERS WILL:</p> <ol style="list-style-type: none"> 1. Recap, and remember the definitions, elements, description and activities of the geographic topics listed above, and prepare for their school as well as WASSCE exams 	<ol style="list-style-type: none"> 1 Map Reading 2 Types of industries of Liberia 3 Climate and natural vegetation 4 Regional Geography of Africa. 5 Population and Settlement 	<p><u>INCLUSIVE AND DIFFERENTIATED LEARNING</u></p> <p>Individual seat work or mixed groups according to gender, abilities, learning styles, etc.</p> <p><u>Activities</u></p> <p>GENERAL REVIEW</p> <ol style="list-style-type: none"> 1. Class discussion 2. Group presentation 3. Individual Project 4. Facilitator provide clarity on questions learners may post 	<p>A. Primary Text General Geography in Diagrams (Pearson)</p> <p>B. Secondary Text Abegunde, et al. Senior Secondary Geography Bk. 1</p> <p>C. Other resource Map reading for west Africa, Certificate, Physical and Human Geography , DISCOVER A-Z OF GEOGRAPGY, WASSCE Q & A (PAPER 1 &2)</p>	<p><u>EXPECTED COMPENTENCIES</u></p> <ul style="list-style-type: none"> • Analytical skill • Effective communication • Research and problem solving • Creative skills <p><u>ASSESSMENT STRATEGIES</u> <u>That can be used to check competencies. Select relevant options</u></p> <p>Fieldtrip Oral questions Assignments Quizzes' Tests</p>

