**TERM 1**

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| **WK** | **PRD** | **TOPIC** | **SUB-TOPIC** | **SPECIFIC OBJECTIVES** | **TEACHING/ LEARNING ACTIVITIESBJECTIVES** | **TEACHING/ LEARNING RESOURCES** | **REFERENCES** | **REMARKS** |
| 5 | 123 | INTRODUCTIONTOGEOGRAPHY | Meaning of terms1. Geography
2. Environment

 Branches of geographyPhysical Human PracticalThe of geography and other disciplineImportance of studying geography | By the end of the lessons the learner should be able to* Define the terms geography and environment
* Explain the origin of geography
* Explain the main areas covered under the branches of geography
* Explain the relationship between geography and other discipline
* Explain the importance of learning geography
 | * Discussions
* Explanations
* Taking notes
* Demonstrate
* Oral exposition
* Define terms
 | * Field
* Chalkboard
* Environment
* Atlas
 | * Certificate geography students Bk 1
* Pg 1-6
* To guide
 |  |
| 6 | 123 | THE EARTH AND SOLAR SYSTEM | Meaning of solar system and introduction to solar systemMembers of the solar systemSunPlanet | By the end of the lessons the learner should be able to* The solar system
* Explain the characteristic of the sun and name the planets and give their characteristic

  | * Drawing
* Discussions
* Note taking
* Oral exposition
* Question and answer
 |  | * Certificate geography students Bk 1
* Pg 7-9
 |  |
| 7891011 1213&14 | 123 | THE EARTH AND SOLAR SYSTEM | Other celestial bodiesAsteroidCometsMeteorsMeteoritesMoonThe origin of the earth and the solar systemPassing star theoryMebole theorySize and shape of the earth | By the end of the lessons the learner should be able to Explain the origin of the earth and the solar system* Explain the characteristic of other celestial bodies
* Describe the shape and size of the earth
 | * Oral exposition
* Discussions
* Note taking
* Demonstrate
* Drawings
* Questions and answering
 | * Chalk board
* Charts
* Sketch diagram
* Photograph
* Globe
* Local environment
* Models of the earth
 | * Certificate geography students Bk 1
* Pg 10-13
 |  |
| 123 | THE EARTH AND SOLAR SYSTEM | The movement of the Rotation of the earth and its effectsLatitudes LongitudeCalculation of time using longitudeThe international data lineRevolution of the earth and its effects | By the end of the lessons the learner should be able to* Explain the rotation of the earth and its effects
* Explain how time is calculated and define the IDL and its importance
* Explain the revolution of the earth and its effects
 | * Oral exposition
* Discussions
* Note taking
* Demonstrate
* Drawings
* Questions and answer
* Calculations
* explanations
 | * Chalk board
* Sketch diagram
* Globe
* Egg ,clay model
 | * Certificate geography students Bk1
* Pg 13-15
 |  |
| 123 | THE EARTH AND SOLAR SYSTEMWEATHER | The structure of the earthAtmosphere HydrosphereThe crustThe mantleThe coneDefinition of weather and elements of weathersThe weather stationsWeather station instrumentsThe Stevenson screen | By the end of the lessons the learner should be able to* Describe the structure of the earth
* Define weather and state the elements of weather
* Define weather stations , list its structur4s and explain the importance of the Stevenson screen
 | * Discussions
* Oral exposition
* Note taking
* Observations outside the class
* Visiting weather stations
* Drawing
* Observation and recording weather data
 | * Chalk board
* Field
* Weather stations
* Weather reports
 | * Certificate geography students Bk1
* Pg 21-23
 |  |
| 123 | WEATHER | Siting a weather stationElements of weatherSunshineMeasurement of sunshineTemperaturesFactors influencing temperatureLatitude Length of the dayAltitudeAspect | By the end of the lessons the learner should be able to* Explain the factors to consider when siting weather station
* Measure sunshine and explain how sunshine duration is measured
* Define temperature and discuss the influencing temperature
 | * Discussions
* Oral exposition
* Note taking

Observations and recording weather dataObservation | * Chalk board
* Weather stations
* Outside environment
 | * Certificate geography students Bk1
* Pg 23-25
 |  |
| 123 | WEATHER | WindDistance from the seaOcean currentCloud coverMeasurement of temperature using MinimumMaximumSix’s thermometerTemperature reading | By the end of the lessons the learner should be able toDiscuss factors influencing air temperatureExplain how temperature is measured using thermometerCalculate mean , daily temperature and daily temperature range | * Discussions
* Oral exposition
* Note taking

ObservationDemonstrationDrawingCalculation | * Chalk board
* Recorded data
* Thermometer
* Newspaper
* Outside environment
 | * Certificate geography students Bk1
* Pg 25-46
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|  | REVISION AND EXAMINATION |  | By the end of the lessons the learner should be able toAnswer questions based on the work covered | Revise the work coveredwrite the test | Exam papers |  |  |
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| **14** | **END** | **Term**  | **EXAMINATION** | **AND CLOSSING**  | * **SCHOOL**
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**TERM 2**

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| **WK** | **PRD** | **TOPIC** | **SUB-TOPIC** | **SPECIFIC OBJECTIVES** | **TEACHING/ LEARNING ACTIVITIESBJECTIVES** | **TEACHING/ LEARNING RESOURCES** | * **REFERENCES**
 | **REMARKS** |
| 123 | 123 | WEATHER | PrecipitationDefinitionForms of precipitationFactors influencing rainfallMeasurement of rainfall and use of the readings | By the end of the lessons the learner should be able to* Define precipitation and explain the various forms of precipitation
* Explain factors influencing rainfall
* To describe how rainfall is measured and uses of rainfall reading
 | * Note taking
* Discussion
* Oral exposition
* Demonstration
* Calculation
* Drawing
 | * Photograph
* Weather reports
* Newspaper
* Local environment
* Sketch diagrams
* Rain gauge
 | * Certificate geography students Bk1
* Pg 29-38
* T. guide bk1
* Pg 36-37, 23 , 27
 |  |
| 123 | WEATHER | Cloud typesMist and fogTypes of fogAtmospheric pressureDefinitionFactors influencing atmospheric pressureWorld distribution of pressure systems | By the end of the lessons the learner should be able to* Define atmospheric pressure and explain factors influencing atmospheric pressure
* Describe world distribution of pressure
 |  |  |  |  |
| 123 | WEATHER | The pressure systemsCyclonicDepressionTropical cyclonesAnticyclonesMeasurement of pressure Mercury barometerAneroid barometer | By the end of the lessons the learner should be able to* Define air masses
* Describe how depressions are formed and their effects on climate
* Describe how pressure is measured using a barometer
 | * Note taking
* Discussion
* Oral exposition
* Demonstration
* Drawing
* Observation
 | * Photograph
* Weather reports
* Sketch diagrams
* World pressure system maps
* Atlas
* Observation
 | * Certificate geography students Bk1
* T. guide 26-28
* Students bk1
* Pg 36-51
 |  |
| 456 | 123 | WEATHER | Weather elementsWindDefinitionThe planetary windMonsoon windLocal windLand and sea breezesKata44batic windAnabatic windHarmattan windSirocco windLeveche windChili windKhousim wind | By the end of the lessons the learner should be able to* List the main planetary wind system and the effect on climate
* Define monsoon wind and local winds and explain their effect on the climate
* Name the local wind and explain their on the climate
 | * Note taking
* Discussion
* Oral exposition
* Drawing
* Question and answering
 | * Sketch diagram
* Maps
* Atlases
* Globe
* Wall maps
 | * Certificate geography students Bk1
* T.guide pgs
* 26-29
* Students bk 1
* Pgs 41-44
 |  |
| 123 | WEATHER | Factors influencing wind directionMeasurement of wind direction and speedEvaporationMeasurement of rate of evaporationThe atmosphere composition structure | By the end of the lessons the learner should be able to* Discuss the factors influencing wind direction
* Describe how wind direction and speed are measured
* Define evaporation and describe how the rate of evaporation is measured
* Describe the composition and structure of the atmosphere
 | * Note taking
* Discussion
* Oral exposition
* Drawing
* Observation
* Explanation
* Presentation
 | * Sketch diagram
* Weather station
* Tank and piche evaporimeter
* Charts
* Sketches
 | * Certificate geography students Bk1
* Pg 44-45, 51-56
* T.guide bk1
* Pg 26-30
 |  |
| 123 | WEATHERSTATISTICAL METHOD | Weather forecastingEffects of weather on human activities Meaning of statistics Statistical methodStatistical data Significance of statisticsTypes of statistical dataNature of statistical data | By the end of the lessons the learner should be able to* Define weather forecasting and explain the effects of weather on human activities
* Define statistics, statistical methods and statistical data and explain significance of statistics
* List the type of statistical data and explain the nature of statistical nature
 |  |  |  |  |
| 789 | 123 | STATISTICAL METHOD | Sources of statistical data Methods of data collectionObservation Advantages disadvantagesInterviewingAdvantages disadvantagesQuestionnaireAdvantages disadvantages | By the end of the lessons the learner should be able to* Identify sources of statistical data and discuss observation as a method of data collection
* Diccuss interviewing as method of data collection
* Discuss administering questionnaires as a method of data collection
 | * Note taking
* Group discussion
* Oral exposition
* Observation
* Explanation
* Presentation
 | * Chalk board
* Resources , persons or field research paper
* Field work(market)
* Recorded intenna (tapes)
* Field work ( school)
 | * Certificate geography students Bk1
* Pg 63-98
 |  |
| 123 | STATISTICAL METHOD | Contact analysis Taking measurementsCarrying out experimentCountingCollecting samplesMethodsOf recordingTaking noteTape recordingPhotograph or filmingField sketchingTabulatingTallyingStatistical data analysis Calculating % rangeMeasure of central tendencyMean Mode median | By the end of the lessons the learner should be able to* Analyze content ,taking measurement and carrying out experiment
* Discuss counting photographing and collecting samples as a method of data collection
* Identify the method of recording data and calculate % range ,mean ,mode and median
 | * Demonstrations
* Note taking
* Experiment
* Observation
* Measuring
* Photographing
* Collecting samples in class
* Experiment by counting
 | * Camera
* Field ( school lab)
* Research
* Newspaper
* Field (road) counting traffic

Tape recorder | * Certificate geography students Bk1
* Pg 63-64
* 98-99
 |  |
| 123 | STATISTICAL METHODMAPS AND MAPWORK | Statistical data PresentationsStatistical tableAdvantageDisadvantageGraphSimple line Graph 1AdvantageDisadvantageCombined bar and line graphSimple wind roseDefinition of MapPlanPictureTypes of mapsSketchesAtlasTopographMarginal information | By the end of the lessons the learner should be able to* Draw and state advantage and disadvantage of graphs
* Construct combined line and bar graphs simple wind rose
* Define map plan , picture and identify the type of maps and marginal information on topographical maps
 | * Drawing
* Note taking
* Atlas
* Oral exposition
* Discussions
 | * Demonstration
 | * Certificate geography students Bk1
* Pg 66-87
 |  |
| 1011&12 | 123 | MAPS AND MAPWORK | Map scaleDefinition of scaleType of scaleConversion of scaleSizes of scales Small scale mapMedium scale mapLarge scale mapUses of scalesMeasurements of distance on mapsEstimating distance on the map Measuring distance along a straight lineCalculation of areas on mapsRegular shape Irregular shapeComposite | By the end of the lessons the learner should be able* Define a scale and identify types of scale
* Describe how different scale are converted
* Estimate distances on a map and measure distance along a straight line and explain different type of scales
* Calculate areas of regular and irregular shapes on map
 | * Topographical maps
* Atlas maps
* Wall maps
* Chalk board
 |  |  |  |
|  | REVISION AND EXAMS |  | By the end of the lessons the learner should be able to answer questions on work done | * Revise the work
* Write exams
 | * Exam papers
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| **12 and****13** | * **END TERM EXAMINATION AND CLOSSING SCHOOL**
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**TERM 3**

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| **WK** | **PRD** | **TOPIC** | **SUB-TOPIC** | **SPECIFIC OBJECTIVES** | **TEACHING/ LEARNING ACTIVITIESBJECTIVES** | **TEACHING/ LEARNING RESOURCES** | * **REFERENCES**
 | **REMARKS** |
| 12 | 1 23 | MAPS AND MAPWORKFIELDWORK | * Methods
* Graph paper method
* Grid square methods / system
* Definition of fieldwork
* Types of fieldwork
* Importance of fieldwork
* Fieldwork procedure
* Topic
* Identifying area of study
* Statement of objectives
 | By the end of the lessons the learner should be able to* Calculate areas of shapes using graph and grid square systems
* Define fieldwork
* State the different types of field work
* Explain the importance of fieldwork
* Explain the procedure to be followed during field study
 | * Demonstration
* Calculations
* Discussions
* Note taking
* Oral expositions
 | * Chalk boards
* Topographical maps
* Local environment
 | * Certificate geography students Bk1
* Pg 89-94
* T. guide 36 -41
 |  |
| 123 | FIELDWORK | * Formulation of hypothesis
* Preparation for field study
* Permission
* Pre-visit
* Preparation of questionnaire
* Division into groups
* Preparation of documents and equipments
* Reading relevant books
* Preparation of a work schedule
* Selection of field tools
* Actual field work study
 | By the end of the lessons the learner should be able to* Formulate hypothesis
* Define reconnaissance and its importance
* Explain preparation of fieldwork
* Explain importance of working schedule in fieldwork
 | * Demonstration

-Discussions * Note taking
* Oral expositions
* Explanation
 | * Resource person
* Chalk board
* Sample of questionnaire for research
 | * Certificate geography students Bk1
* Pg 95-96
* T.guide pg 41
 |  |
| 3455 | **1****2****3** | FIELDWORK | * Methods of data collection
* Observation
* Interviewing
* Administrative questions
* Digging
* Tasting / smelling
* Sampling
* Random
* Transecting
* Use of quadrants
* Methods of recording data
* Field sketching
* Note taking
* Administrative questions

Labeling samples tape recordingphotography | By the end of the lessons the learner should be able to* Describe method of data collection
* State the advantage and disadvantage
* Of each method of data collection
* Describe method of sampling
* Describe methods of data recording
 | * Demonstration

-Discussions * Note taking
* Oral expositions
 | * Field ( local environment)
* Paper / bucket
* Class list
* Note book
* Photograph
* Tape recorder
 | * Certificate geography students Bk1
* Pg 99-102
* T. guide
* Pg 41
 |  |
| 123123 | FIELDWORKMINERAL AND ROCKSMINERAL AND ROCKS | Methods of data analysis and presentationsProblems encountered in fieldworkDefinition and characteristics of mineralsClassification of rocksIgneousCharacteristics of intrusive igneous rocksExtrusive igneous rocks and their characteristics Sedimentary rocksMechanically formedOrganically formed sedimentary rocksChemically formed sedimentary rocksMetamorphic rocks Age of the rocks | By the end of the lessons the learner should be able to* Describe and explain methods of data analysis and presentation
* Identify problems during fieldwork
* Define minerals and rocks
* State the characteristics of minerals
* Classify rocks according to mode of formation

By the end of the lessons the learner should be able to* Explain the formation of extrusive igneous rocks and mechanically formed sedimentary rocks
* Explain the formation of organically formed and chemically formed sedimentary rocks
* Explain the formation of metamorphic rocks and identify the age of rocks
 | -Discussions * Note taking
* Oral expositions
* Observation

-Discussions * Note taking
* Oral expositions
* Observation
* Drawing table
 | * Field
* Class (students)
* Resource persons
* Chalk board
* Rock samples
* Fieldwork
* Photograph

Rock samplesTables PhotographFieldSketch diagramChalk board | * Certificate geography students Bk1
* Pg 102 -109
* T, guide bk 1
* Pg 41 – 47

Certificate geography students Bk1* Pg 107 -112
* T .guide
* Pg 48-49
 |  |
| 123 | MINERAL AND ROCKSMINING | Distribution of major rocks in Kenya Significance of rocks Definition Occurrence of mineralsFactors affecting exploration of mineral | By the end of the lessons the learner should be able to* Explain the distribution of major rock type in Kenya and their significance
* Define mining and explain the occurrence of minerals
* Explain the factors affecting exploration of minerals
 | Discussions * Note taking
* Oral expositions
* Observation
* Question and answering
 | * Field work
* Photograph
* Chalk board
* Charts
* field
 | Certificate geography students Bk1* Pg 112 – 119
* T .guide
* Pg 48 - 49
 |  |
| 78 | 123 | MINING | Methods of mining Under ground Open-castAlluvialSubmarineTypes of minerals MetallicNon –metallicFossil fuels and energy mineralsMajor minerals in E. AfricaTrona in KenyaDiamond in TanzaniaCopper in Uganda | By the end of the lessons the learner should be able to* Describe methods of mining
* classify minerals
* locate major minerals on the map of E. Africa
 | Discussions * Note taking
* Oral expositions
* Observation
* Question and answering
 | * Photograph
* Chalk board
* Field
* Sketch map
* Atlas
 | Certificate geography students Bk1Pg 119-125* T . guide
* Pg 48-49
 |  |
| 123 | MINING | Mineral potential in E.Africa Minerals in other regions of the worldOil in LibyaGold and diamonds in south Africa Petroleum in Middle East significance of minerals in Kenya | By the end of the lessons the learner should be able to* Describe the occurrence of specific minerals and their exploitation in selected countries
* Describe the occurrence of petroleum and its exploitation in the Middle East
* Explain the significance of minerals in Kenya
 | Discussions * Note taking
* Oral expositions
* Explanation
 | * Wall map
* Sketch diagrams

ChartsChalk boardMapFieldResource persons | * Certificate geography students Bk1
* Pg 126-133
* T. guide
* Pg 48-49
 |  |
| 123 | MINING | Problems of mining in KenyaEffects of mining PollutionReclamation Registration | By the end of the lessons the learner should be able to* Account for the problems facing mining industry in Kenya
* Explain the effects of mining
* Explain how dereliction and pollution can be controlled
 | Discussions * Note taking
* Oral expositions
* Explanation
* Viewing
* Observation
 | * Local environment
* Resource person
* Photographs
* Field
* Field film or video tapes
 | * Certificate geography students Bk1
* Pg 133 -137
* T .guide
* Pg 48-51
 |  |
| 10 ,11 & 12 | 1 | Revision of work covered during the year , exam and marking | By the end of the lessons the learner should be able toAnswer questions based on the work covered during the year  |  | * Revise and write the exams
 | * Exam paper
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|  **11& 12** | **END TERM EXAMINATION AND CLOSSING SCHOOL** |  |  |