

DOYEN PUBLISHERS

HIGH SCHOOL SCHEMES OF WORK

GEOGRAPHY FORM 4

(Term 1, 2 & 3)

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			GEO	GRAPHY FORM	4 SCHEMES O	F WORK - TER	M 1	
W K	LN	TOPIC	SUB-TOPIC	LEARNING OBJECTIVES	TEACHING/LEARNING ACTIVITIES	TEACHING/LEARNING RESOURCES	REFERENCES	RMKS
1	1	Statistical methods	Age-sex Pyramid	By the end of the lesson, the learner should be able o -Define age-sex pyramid -Draw a simple age-sex pyramid	-Drawing age-sex pyramids -Taking short notes on procedures of constructing the pyramid	-Student book -Chart/manila paper -Graph papers	-Certificate Geography form 4 student copy pg 1-2 -KLB secondary form four student book page 2-4 -Comprehensive Geography form 4 student book page 1-2 -Teacher's guide pg 22-23	
	2-3	Statistical Methods	Age-sex pyramid	By the end of the lesson, the learner should be able to -Analyse and interpret the pyramid -Explain the advantages and disadvantages of age-sex pyramid	-Analysing and interpret pyramid -Discussions -Use of questions and answers	-Charts (manila papers) -Internet downloads -Figures from static abstract -Student book -Teachers guide -Hypothetical figures	-Certificate Geography form 4 student copy pg 4-6 -KLB secondary form four student book page 3,4 -Comprehensive Geography form 4 student book page 2-3,4	
	4	Statistical method	Dot maps	By the end of the lesson, the learner should be able to -Define dot maps & factors considered -Value of the dot -Size of each dot, location of each dot -Draw a simple dot map	-Drawing the dot map	-Topographical mps -Charts -Felt pens -Student book -Hypothetical population figures	-Certificate Geography form 4 student copy pg 6-7 -KLB secondary form four student book page 4-6 -Comprehensive Geography form 4 student book page 2-4-6	
	5	Statistical method	Dot maps	By the end of the lesson, the learner should be able to -Analyse and interpret dot maps -Explain the advantages and disadvantage of dot maps	-Discussion -Question and answers -Observing and interpreting dot maps -Taking assignments	-Topographical maps -Charts (manila paper -Black board -Student's book -Teacher's guide	-Certificate Geography form 4 student copy pg 7-8 -KLB secondary form four student book page 6-7 -Comprehensive Geography form 4 student book page 4-6	

2	1	Statistical method	Chloroplett maps	By the end of the lesson, the learner should be able to -Define chloroplett map -Draw a chloroplett map	-Drawing chloroplett maps -Describing construction of chloroplett map -discussion	-statistical abstracts -manila paper and felt pens -student book	-Certificate Geography form 4 student copy pg 8-9 -KLB secondary form four student book page 8-9
	2-3	Statistical Methods	Chloroplett maps	By the end of the lesson, the lesson, the lesson, the learner should be able to -Interpret and analyse the chloplette map	-Discussion -Questions and answers	-Internet down loads -Statistical abstract -Charts student book	-Certificate Geography form 4 student copy pg 10 -KLB secondary form four student book page 10 -Comprehensive Geography form 4 student book page 4
	4	Statistical methods	Chloroplett Maps	By the end of the lesson, the learner should be able to -Explain advantages and disadvantages of chloroplett map	-Discussions -Questions and answers -Observation of the charts	-Internet downloads -Hypothetical figures -Student book	-Certificate Geography form 4 student copy pg 10 -KLB secondary form four student book page 10
	5	Land Reclamati on and rehabilitati on	Methods of land reclamation	By the end of the lesson, the learner should be able to -Discuss and review the last topic -Define the term land reclamation and rehabilitation -Give various methods of land reclamation and rehabilitation -Drainage of swamps, tsetse fly control -Afforestation	-Teacher asking questions -Discussions -Taking notes -Teacher give examples	-Photographs -Student book -Teacher's guide	-Certificate Geography form 4 student copy pg 11- 13 -Comprehensive Geography form 4 student book page 10
3	1	Land reclamatio n & rehabilitati on	Mwea Tabere irrigation scheme	By the end of the lesson, the learner should be able to -Explain factors that influence the location of Mwea Tebere irrigation schemes -Perennial rivers -Black cotton soils -Rain-fed agriculture -Gentle sloping land -Sparse population	-Teachers explaining Mwea Tebere irrigation scheme -Teacher discussing factor influencing its location	-Photographs -Sketch maps -Student books	-Certificate Geography form 4 student copy pg 14- 16 -KLB secondary form four student book page 13-14 -Comprehensive Geography form 4 student book page 10-12

			-Loamy soils -Presence of detainees			
2	Land reclamatio n & rehabilitati on	Mwea Tebere irrigation scheme -Organization of the scheme cultivation	By the end of the lesson, the learner should be able to -Discuss the organization of mwea Tabere irrigation scheme -Explain the cultivation in the scheme	-Discussion -Taking notes	-Photographs -Data from national irrigation Board -Resource person -Students book	-KLB secondary form four student book page 12-14 -Comprehensive Geography form 4 student book page 12-14
3	Land reclamatio n & rehabilitati on	Mwea Tebere irrigation scheme -Benefits of the scheme -Problems in the scheme -Increased food production -Settlement control floods -Diversification of production, economic development Problems -Disease & pest weeds -Finances -Poor roads -Shortage of labour -Inadequate water -Factors leading to success	By the end of the lesson the learner should be able to -Explain the benefits of the scheme -Discuss problems in the scheme -Give factors that led to the success of the scheme & future plans	-Discussion -Taking notes -Questions and answers -Drawing sketch map	-Resource persons -Field work	-Certificate Geography form 4 student copy pg 18- 20 -KLB secondary form four student book page 16 -Comprehensive Geography form 4 student book page 14
4-5	Land reclamatio n & rehabilitati on	Pekerra irrigation scheme -Description of the scheme -Factors influencing the scheme	By the end of the lesson, the learner should be able to -Discuss the location of the scheme -Explain factors influencing its location -Discuss its organization & management	-Discussions -Taking notes -Questions and answers -Sketching maps	-Resource persons -Fieldwork -Photographs -Student book	-Certificate Geography form 4 student copy pg 21- 22 -KLB secondary form four student book page 17

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			Organization & management -Control flood utilize excess water in pekerra -Flat uncultivated land -Fertile loamy -Dry conditions				-Comprehensive Geography form 4 student book page 14-15	
4	1-2	Land reclamatio n & rehabilitati on	Perkerra irrigation scheme -Benefits -Settlement -Income generation -Development of infrastructure Problems -Remote area -Inadequate water -Sparse population	By the end of the lesson, the learner should be able to -Explain the benefits of the scheme -Problems facing the scheme & possible solutions & future plans	-Discussions -Taking notes -Questions & answers -Drawing of sketch map	-Resource persons -Field Photographs -student book	-Certificate Geography form 4 student copy pg 23 -KLB secondary form four student book page 17	
	3	Land reclamation & rehabilitation	Significance of irrigation farming in Kenya and problems facing irrigation farming -Improved farming standard -Settlement -Rehabilitation & development of the areas -Employment Problems -Weed -Disease/pests -Silting -Fluctuating prices -Increased salinity	By the end of the lesson, the learner should be able to -Explain the significance of irrigation farming in Kenya -Discuss problems facing irrigation farming in Kenya	-Discussions -Tote taking -Questions and answers	-Charts -Manila paper -Students book	-Certificate Geography form 4 student copy pg 24 -KLB secondary form four student book page 18-19 -Comprehensive Geography form 4 student book page 17-20	

			-Fluctuating volume of water				
	4	Land reclamation & rehabilitation	Methods of land reclamation & rehabilitation in Kenya Irrigation -Water -Silting -Flood Sprinkler -Trickle -Canals -Drip Drainage of swamps -Importance -Open ditches -Drain pipes -dykes	By the end of the lesson, the learner should be able to -explain irrigation and drainage of swamps as a method of land reclamation -give importance of drainage of swamps	-discussions -note taking -questions and answers	-Photographs -Student book	-KLB secondary form four student book page 19-21 -Comprehensive Geography form 4 student book page 20-26
	5	Land reclamation & rehabilitation	Methods of land reclamation & rehabilitation -Control of pests -Refilling of quarrels & eroded landscape -Afforestation & reforestation & reforestation -Planting of drought resistant crops -Agro forestry -Control of floods -Controlled grazing -Mulching -Manu ring -Bush fullowing	By the end of the lesson, the learner should be able to -Explain various methods of land reclamation & rehabilitation	-Discussions -Questions and answers -Note taking	-Photographs -Text books	-KLB secondary form four student book page 23 -Comprehensive Geography form 4 student book page 26-27
5	1-2	Land reclamation and	Case study Tsetse fly in Lambwe valley	By the end of the lesson, the learner should be able to	-Discussions -Questions and answers -Note taking	-Student book -Photographs	-KLB secondary form four student book page 24

		Rehabilitat ion	-Benefits -Control measures	-Explain tsetse fly control in Lambwe valley -Explain the benefits of the project			
	3	Land reclamatio n and rehabilitati on	Land reclamation in Netherlands Zyder Zee project	By the end of the lesson, the learner should be able to -Explain land reclamation in Netherlands -Reclamation methods -Discuss the Zyder zee project -Explain the benefits of Zuyder Zee project -Factors favoring farming -Activities in poiderland in Netherlands	-Discussions -Questions and answers -Notes taking -Sketching of maps	-Photographs -Sketch maps -Student note books	-KLB secondary form four student book page 26-28 -Comprehensive Geography form 4 student book page 28-32
	4	Land reclamatio n and rehabilitati on	The Delta plan project -Benefits -Comparisons Other land reclamation methods in Netherlands	By the end of the lesson, the learner should be able to Explain -Delta plain project -Benefits of the project -Other reclamation methods in Netherlands	Discussions -Note-taking -Asking and answering questions	photographs	-KLB secondary form four student book page 28-29 -Comprehensive Geography form 4 student book page 32
	5	Land reclamatio n & rehabilitati on	Comparison between land reclamation in Kenya and Netherlands - Similarit ies - differenc es	By the end of the lesson, the learner should be able to -give a comparison between land reclamation in Kenya and Netherlands	-discussions -Questions and answer	- Photographs	-Certificate Geography form 4 student copy pg 31 -KLB secondary form four student book page 29 -Comprehensive Geography form 4 student book page 32-33
6	1	Fishing	Definition of -Fishing -Fisheries -Fish farming Factors influencing fishing -Planktons -Ocean current	By the end of the lesson, the learner should be able to -Define the terms fishing, fisheries and fish farming -Explain factors influencing fishing	-Discussions -Asking and answering questions -Note taking -Drawing diagrams of ocean currents -Sketch mapping	-Photographs -Field work -Resource persons -Sketch maps	-KLB secondary form four student book page 31-34 -Comprehensive Geography form 4 student book page 35

2	Fishing	-Nature of coastline -Capital -Technology -Market -Transport -Cool waters -Fishing culture Distribution of fishing grounds of the world -The Atlantic fishing grounds -Pacific	By the end of the lesson, the learner should be able to -Discuss various fishing grounds in Atlantic & pacific oceans	-Sketching maps -Note taking -discussions	-Photographs -Sketch maps -Globe -atlas	-Certificate Geography form 4 student copy pg 36- 40 -KLB secondary form four student book page 34-38 -Comprehensive Geography form 4 student book page 36-41
3	Fishing	Fishing grounds in Africa -Marine fisheries -Inland fisheries Types of fishing -Crustacean -Pelagic -Dermersal -Inshore -Fresh water	By the end of the lesson, the learner should be able to -Discuss the Various fishing ground in Africa -Explain different types of fishing	-Note taking -Discussions -Asking questions	-Photographs -Atlases	-Certificate Geography form 4 student copy pg 42 -KLB secondary form four student book page 39-42 -Comprehensive Geography form 4 student book page 42
4-5	Fishing	Methods of fishing -Drifting -Trawling -Seining -Line fishing -Harpocturing -Herb -Barners -Lampara -Guli nets	By the end of the lesson, the learner should be able to -Describe the various fishing methods	Discussions -Note taking -Asking and answering questions -Drawing sketches	-Photographs -Manila paper -Felt pens	-Certificate Geography form 4 student copy pg 44- 46 -KLB secondary form four student book page 42-44 -Comprehensive Geography form 4 student book page 44-49

7	1	Fishing	Fresh water and marine fisheries in east Astica Kenya -L. Victoria -L. turkana -L.Naivasha Tanzania -L. Victoria -L. Tanganyika -L. Rukwa Uganda -Victoria -Kyoga -Albert -Edward & George Marine Fisheries in Africa -Indian ocean	By the end of the lesson, the learner should be able to -Discuss various Fresh & marine Fisheries in East Africa	-Discussions -Note-taking -Asking and answering questions -Sketching diagrams	-Photographs -Sketch maps -atlas	-Certificate Geography form 4 student copy pg 47- 51 -KLB secondary form four student book page 44-47 -Comprehensive Geography form 4 student book page 49-54
	2-3	Fishing	Fish farming in Kenya -Significance of fishing industry in Kenya -Problems facing fishing in Kenya and solutions	By the end of the lesson, the learner should be able to -Discus fish farming in Kenya -Explain significance of fishing industry in Kenya -Discuss problems facing fishing in Kenya -Give solutions to the problems	-Discussions -Note taking -Asking and answering questions	-Photographs	-KLB secondary form four student book page 47,52,53-56 -Comprehensive Geography form 4 student book page 54-57
	4	Fishing	Fishing in Japan -Factors that make Japan a leading fishing nation -Problems facing fishing in Japan	By the end of the lesson, the learner should be able to -Describe fishing in Japan -Explain factors contributing to success of Japanese fishing industry -Explain problems facing fishing in Japan	-Discussions -Asking and answering questions -Taking notes -Sketching maps	-Globe -Atlas -Photographs	-KLB secondary form four student book page 56-57 -Comprehensive Geography form 4 student book page 58-59
	5	Fishing	Fishing in Japan & Kenya -Similarities -Differences	By the end of the lesson, the learner should be able to -compare and contrast fishing activities in Kenya and Japan	-Discussions -Class debating -Asking and answering questions -Test and quiz	-Photographs -Students book -Download from the internet	-Certificate Geography form 4 student copy pg 61- 62 -KLB secondary form four student book page 58-59

			Management and conservation of fresh water and marine water Definition of	By the end of the lesson, the	-Discussions	-Photographs	-Gateway secondary Revision Geography page 93 -Certificate Geography
8	1	Wildlife	wildlife Factors influencing distribution of wildlife in East Africa -Water -Vegetation -Climate -Soils -Human activities	learner should be able to -Define wildlife -Identify factors influencing wildlife distribution	-Making & taking notes -Asking and answering questions -Oral exposition (Fieldwork)	-Maps -Student book	form 4 student copy pg 61-62 -KLB secondary form four student book page 60-61 -Comprehensive Geography form 4 student book page 63-68
	2	Wildlife	Distinction between game reserve National parks & sanctuaries Major national parks, game reserves and sanctuaries in East Africa	By the end of the lesson, the learner should be able to -Distinguish between game reserves, national parks & sanctuaries Draw and locate different game reserves, national parks and sanctuaries on east Africa countries. map	-Sketching of maps -Taking notes -Asking and answering questions	-Photographs -Students book -Field work -Resource persons	-Certificate Geography form 4 student copy pg 63,64 -KLB secondary form four student book page 61-63 -Comprehensive Geography form 4 student book page 68-71
	3-4	Wildlife	Significance of wildlife -Foreign exchange -Employment -Provision of food -Scientific study -Medicinal value -Hotel industry -Raw material for industry	By the end of the lesson, the learner should be able to: -Discuss significance of wildlife	-Discussions -Asking and answering questions -Taking notes -Taking photographs	-Photographs -Student book -Fieldwork -Resource persons	-KLB secondary form four student book page 64 -Comprehensive Geography form 4 student book page 74-76
	5	Wildlife	Problems facing wildlife in East Africa -Poaching	By the end of the lesson, the learner should be able to: -Explain the problems facing wildlife in East Africa	-Taking notes -Discussions -Asking and answering questions	-Field work -Photographs -Films -Students book -Journals -Video cassettes	Certificate Geography form 4 student copy pg 65-68 -KLB secondary form four student book page 65-68

			-Human encroachment -Insecurity Overpopulation -Pollution -Drought -Roads & tracks -Bush fires -Human animal -Conflict -Pest & diseases			-Newspapers	-Comprehensive Geography form 4 student book page 76-78
9	1-2	Wildlife and tourism	Management and conservation of wildlife	By the end of the lesson, the learner should be able to -Explain how wildlife can be conserved and managed -Define tourism - Domestic - Ecotourism - Mass tourism - International tourism -Explain reasons for encouraging domestic tourism	-Taking notes -Discussions Asking and answering questions	-Field work -Photographs -Films -Resource persons -Journals & magazines	-Certificate Geography form 4 student copy pg 68- 70 -KLB secondary form four student book page 68-71 -Comprehensive Geography form 4 student book page 79-82
	3	Tourism	Factors influencing tourism -Physical -Human	By the end of the lesson, the learner should be able to -Discuss factors influencing tourism	-Taking notes -Discussions -Asking and answering questions	-Resource persons -Films -Magazines -newspapers	-Certificate Geography form 4 student copy pg 71- 73 -KLB secondary form four student book page 73-75 -Comprehensive Geography form 4 student book page 83-86
	4	Tourism	Tourist Attraction in Kenya -Wildlife -Beautiful scenery -Historic & prehistoric sites -Warm climate -Sundry beach	By the end of the lesson, the learner should be able to -Discuss the various tourist Attractions in Kenya -Give examples in Kenya -Locate tourist attraction sports in Kenya	-Discussions -Making & taking notes -Asking and answering questions	Field work -Films -Photographs -Maps -Student note book -Atlases -Charts -newspapers	-Certificate Geography form 4 student copy pg 73- 74 -KLB secondary form four student book page 75-79 -Comprehensive Geography form 4 student book page 86-90

			-Cultural activities				
	5	Tourism	-Games & sports Significance of tourism -Foreign exchange Revenue -Employment -Infrastructure understanding & patriotism Problems facing and associated with tourism in	By the end of the lesson, the learner should be able to -Explain significance of tourism in Kenya -Explain problems facing tourism in Kenya	-Asking and answering questions -Making and taking notes -Discussions -Watching films & videos	-Maps -Photographs -Students book -Films -Journals -Newspaper	-Certificate Geography form 4 student copy pg 74- 75 -High flyer series KCSE & Revision Geog 1995-2010 pg 158 -Comprehensive Geography form 4 student book page 91-96
10	1-2	Tourism	Kenya Future of tourism in Kenya Tourism in Switzerland -Beautiful scenery -Climate infrastructure -Neutrality -Language diversity -Central location -Accommoda	By the end of the lesson, the learner should be able to -Explain the future of tourism in Kenya -Explain tourism in Switzerland -Explain factors influencing tourism in Switzerland	-Asking and answering questions -Discussions -Making and taking notes -Watching films & videos -Reading newspapers of journals	-Maps -Photographs -Journals -Films -newspapers	-Certificate Geography form 4 student copy pg 78- 81 -KLB secondary form four student book page 82,84-85 -Comprehensive Geography form 4 student book page 96-98
	3	Tourism	tion facilities Significance of tourism in Switzerland Future of tourism in Switzerland Comparison of tourism in Kenya and Switzerland	By the end of the lesson, the learner should be able to -Explain significance of tourism in Switzerland -Discuss future of tourism in Switzerland -State the differences and similarities between tourism in Switzerland and Kenya	-Watching films and videos -Reading journals -Magazines & newspapers -Asking and answering questions -Discussions -Making and taking notes	-Videos -Films -Journals -Newspapers -Photographs	-Certificate Geography form 4 student copy pg 83- 84 -KLB secondary form four student book page 83-84 -Comprehensive Geography form 4 student book page 99-102
	4-5	Test	Testing the student understanding on	By the end of the lesson, the learner should be able to	-Answering questions	-Full scalps -Pens -Question papers	-High flyer series KCSE -Revision Geography 1995- 2010 pg 159

11	1 & 2	Energy	wildlife & tourism Definition Types and sources of Energy -Renewable -Non-renewable -Petroleum -Coal -Peat -Nuclear	-Answer simple question on wildlife/Tourism By the end of the lesson, the learner should be able to -Define energy -Describe non-renewable & renewable sources of energy - Solar - Wind - Wave - Hydropower - Geothermal - Biogas - Charcoal Fuel, animals	-Discussions -Answering questions -Student name of energy -Observe photographs and pictures -Note taking	-Photographs -Films & videos -charts	-Certificate Geography form 4 student copy pg 88- 98 -KLB secondary form four student book page 87-94 -Comprehensive Geography form 4 student book page 103-109 -Highflyer series Revision text 1995-2010 pg 160-163
	3	Energy	Hydro-electric power stations in Kenya and Uganda -Tana owen falls dam (Africa)	Identify the source of energy By the end of the lesson, the learner should be able to -Describe HEP power stations in Kenya & Uganda (Africa -(state examples in Kenya & Uganda Africa -Compare HEP production in Kenya and Uganda	-Discussions -Answering questions -Observing photographs & pictures -Note taking -Sketching diagrams	-Photographs -Pictures -Charts -Atlas -Wall map	-Certificate Geography form 4 student copy pg 99- 101 -KLB secondary form four student book page 99-101 -Comprehensive Geography form 4 student book page 110 -Highflyer series Revision text 1995-2010 pg 163-164
	4	Energy	Geothermal power project in Kenya Significance of energy -Industrial use -Transport sector -Domestic use -Agriculture sector	By the end of the lesson, the learner should be able to -Discuss geothermal power project in Kenya -Explain the significance of energy	-Photograph observation -Watching films & videos -Discussions -Asking and answering questions -Taking Photographs	-Photographs -Films -Videos -Field work	-Certificate Geography form 4 student copy pg 104-105 -KLB secondary form four student book page 101-102 -Comprehensive Geography form 4 student book page 113-116 -Highflyer series Revision text 1995-2010 pg 163-164

	5	Energy	Energy crisis Effects of energy crisis in the world Management and conservation of energy	By the end of the lesson, the learner should be able to -Define energy crisis -Explain impacts of energy crisis in the world -Describe how energy can be conserved	-Discussions -Asking and answering questions -Class debated -Taking notes	-Student book -Photographs	-Certificate Geography form 4 student copy pg 105-108 -KLB secondary form four student book page 102-105 -Comprehensive Geography form 4 student book page 116-119	
12	1-5	Revision	Revision on topics covered and taking end of term exam	By the end of the lesson, the learner should be able to; -Answer questions on topics covered	-Answering questions in the revision text -Taking end term exam	-Full scalps -Pens -Questions papers	-Highflyer series revision text 1995-2010 pg 164-166	
				REVISION AND	END OF TERM ONE EXAM	INATIONS		

			GEOGI	RAPHY FORM	4 SCHEMES C	F WORK - TE	RM 1	
W K	LN	TOPIC	SUB-TOPIC	LEARNING OBJECTIVES	TEACHING/ LEARNING ACTIVITIES	TEACHING/ LEARNING RESOURCES	REFERENCES	RMKS
1	1-2	Industry	Definition of; -Industry Industria lization Factors influencing location of industry & development -Capital man-power market -Raw material -Transport & communication -Electricity -Water -Government policy -Cost of land	By the end of the lesson, the learner should be able to -Define terms - Industry - Industrialization -Explain the factors influencing location and development of industry -State examples of industries	-Discussion -Field visits -Taking photographs -Making & taking notes	-Pictures and photographs -Text book -diagrams	-Certificate Geography form 4 student copy pg 112-116 -KLB secondary form four student book page 107-111 -Comprehensive Geography form 4 student book page 121-126 -Highflyer series revision text 1995-2010 pg 166-167	
	3 & 4	Industry	Types of industry -Primary -Secondary -Tertiary Distribution of industries in Kenya -Extractive -Food processing Agricultural non-food -Non-agricultural manufacturing industries -Cottage industry Service industry	By the end of the lesson, the learner should be able -Describe types of industries -Account for the distribution of industries in Kenya -State examples in Kenya	-Discussions -Making and taking notes -Field visits -Taking photographs -Observing films videos & slides	-Photographs -Films -Videos -Slides	-Certificate Geography form 4 student copy pg 116-120 -KLB secondary form four student book page 111-118 -Comprehensive Geography form 4 student book page 126-132 -Highflyer series revision text 1995-2010 pg 166-167	
	5	Industry	Jua Kali industries Importance of jua kali industries	By the end of the lesson, the learner should be able to	-Discussions -Making and taking notes -Taking photographs	-Photographs -Films -Text books	-Certificate Geography form 4 student copy pg 121-124 -KLB secondary form four student book page 121-123	Doze 15 of 30

			Significance of industrialization in Kenya -Negative -Positive	(i) Describe juakali industries -Explain the significance of industrialization in Kenya -Explain importance of juakali industries (sector)			-Comprehensive Geography form 4 student book page 135- 139
2	1-2	Industry	Problems of industrialization and their possible solutions -Pollution -Neglect of Agriculture -Unemployment -Displacement of people -Rural-urban migration -Depletion of resources -Repatriation of profits -Inadequate capital	By the end of the lesson, the learner should be able to -Explain the problems of industrialization and their solutions	-Discussions -Observing videos and films -Making and taking notes	-Videos -Films -Text book	-KLB secondary form four student book page 123-126 -Comprehensive Geography form 4 student book page 140-143
	3	Industry	Cottage industry in India -Characteristics -Problems -Benefits	By the end of the lesson, the learner should be able to -Describe cottage industry in India -Give characteristics of cottage industry in India -State benefits of cottage industry in India	-Discussions -Asking and answering questions -Taking notes -Observing photographs -Sketching diagrams	-Text book -atlas and maps -Photographs -diagrams	-Certificate Geography form 4 student copy pg 128-129 -KLB secondary form four student book page 126-126 -Comprehensive Geography form 4 student book page 143- 145
	4-5	Industry	Iron and steel industry in the Ruhr region of Germany -Factors favouring development -Problems -significance	By the end of the lesson, the learner should be able to: (i) describe iron & steel industry un Ruhr -state factors favouring the development -explain the problems faced -explain the significance	-discussions -asking and answering questions -taking notes -observing photographs -reading journals & newspapers	-text book -atlas & maps -Photographs -Journals	-Certificate Geography form 4 student copy pg 130-132 -KLB secondary form four student book page 129-131 -Comprehensive Geography form 4 student book page 145- 147

3	1 & 2	Industry	Car manufacturing and electronics in Japan -Factors that have contributed to development -historical -Capital -Man-power -Landscape -Water -Technology -Low prices Car manufacturing & electronics regions in Japan -Tokyo -Lakohama -Osaka-kobe -Nagoya Significance -Foreign exchange -Employment -Towns -Transport network	By the end of the lesson, the learner should be able to -Describe care manufacturing in Japan -Explain factors that have contributed to it's development -State areas that carmanufacturing & electronics takes place -Explain significance of car manufacturing & electronics in Japan	-Observing photographs -Taking notes -Asking and answering questions -Discussions -Taking notes -Sketching diagrams	-Journals -Photographs -Text book -Talas & maps -Text book -diagrams	-Certificate Geography form 4 student copy pg 132-134 -KLB secondary form four student book page 131-134 -Comprehensive Geography form 4 student book page 147-151
	3	Transport & communic ation	Definition; -Transport -Communica tion Modes of transport in Africa -Road -Railway -water	By the end of the lesson, the learner should be able to -define transport, communication -explain the modes of transport -state advantages and disadvantages of each	-Observing photographs -Discussions -Asking and answering questions -Sketching diagrams -Taking photographs	-Photographs -Text books -Diagrams -Maps & atlas -Field study	-Certificate Geography form 4 student copy pg 138,140-144 -KLB secondary form four student book page 137-139 -Comprehensive Geography form 4 student book page 161- 165
	4-5	Transport	-Pipelines -Air -Lifts and escalators -Human and animal -containeri zation	By the end of the lesson, the learner should be able to -explain the modes of transport -give advantages and disadvantages of each	-discussions -observing photographs -taking photographs -asking and answering questions -observing maps & atlas	-Photographs -Maps -Atlases	-Certificate Geography form 4 student copy pg 139-140-144- 146,152-154 -KLB secondary form four student book page 140-142 -Comprehensive Geography form 4 student book page 166- 170

4	1 & 2	Communication	Means of communication -Oral -Face to face -Telephone -Radio call -Radio -Television Written -Newspapers & magazines -Postal and courier services -Internet facsimile -Telegrams -Letter -Telex Audio-visual -Videos -Films -Posters -Charts & diagrams	By the end of the lesson, the learner should be able to -Describe various means of communication -Stating the advantages -State examples	-Discussions -Asking and answering questions -Observing magazine -Newspaper phone -letters	-videos -charts -phones -radio -letter -posters	-Certificate Geography form 4 student copy pg 142-144 -KLB secondary form four student book page 154 -Comprehensive Geography form 4 student book page 170- 175	
4	3	Communication	Distribution of major lines of transport in Africa -Roads -Railways -Airlines -Water ways	By the end of the lesson, the learner should be able to -Sketch distribution of lines in map	-Sketching diagrams -Observing maps and atlases Asking and answering	-Atlases -Maps -Text book	-KLB secondary form four student book page 144-148 -Comprehensive Geography form 4 student book page 177- 179	
	4	Transport & communic ation	The role of transport and communication the economic development of Africa -Trade -Employment opportunity -Tourism -Information -Revenue -Industrializa tion	By the end of the lesson, the learner should be able to -Explain the role of transport & communication in development of Africa	-Asking and answering questions -Taking notes -Listening to resource persons	-Text book -Resource person	-Certificate Geography form 4 student copy pg 155-156 -KLB secondary form four student book page 148-150 -Comprehensive Geography form 4 student book page 179- 180 -Highflyer series revision text 1995-2010 pg 166-167	

			-Mobility of labour settlement				
	5	Transport and communic ation	Problems facing transport and communication -Harsh environment -Non-navigable river -Civil wars -Inadequate communication facilities -Different railway & road system -Capital -Technology -Laws -Language barriers -security	By the end of the lesson, the learner should be able to -Explain problems facing transport and communication in Africa -Give possible solutions to the problems -Facing transport & communication	-Asking and answering questions -Taking notes -Listening to resource persons	-Text books -Resource persons	-Certificate Geography form 4 student copy pg 157-161 -Comprehensive Geography form 4 student book page 181- 183
5	1-2	Transport and communic ation	Great lakes and the st Lawrence seaway Project as multipurpose Different developments Roles played	By the end of the lesson, the learner should be able to -Discuss the great lakes and St. Lawrence seaway -Explain the roles played by Great lakes & st. Lawrence seaway in economies of U.S,A and Canada	-Discussions -Asking and answering questions -Note taking -Sketching diagrams	-Diagrams -Text book -Globe -Atlas & maps	-Certificate Geography form 4 student copy pg 162-164 -KLB secondary form four student book page 153-156 -Comprehensive Geography form 4 student book page 183- 186
	3	Trade	Definition of trade Barter trade Types of trade -Internal -External Factors influencing trade -Capital goods -Security -Market transport -technology	By the end of the lesson, the learner should be able to: -define the term trade, barter trade -describe types of trade -explain different factors influencing trade	-discussions -asking and answering questions -note taking -listening to resource persons	-textbook -resource persons	-Certificate Geography form 4 student copy pg 166-172 -KLB secondary form four student book page 158-161 -Comprehensive Geography form 4 student book page 188- 192
	4-5	Trade	Kenya's exports and imports		-discussions -asking and answering questions	-text book -resource persons -charts	-Certificate Geography form 4 student copy pg 172-182

			Significance of trade Problems facing trade in Kenya -Industrial growth Earns foreign exchange -Source of revenue -Infrastructure -Employment opportunities Problems -Nature of export and imports -Political strife -Corruption -High dependence on imports -Smuggling -insecurity	By the end of the lesson, the learner should be able to -explain the significance of trade -explain the problems facing trade in Kenya	-note taking -listening to resource persons -observing charts -field visit to an open air market -retail shops observing figures data	-field study -statistical abstract	-KLB secondary form four student book page 161-166 -Comprehensive Geography form 4 student book page 192-198
6	1	Trade	Future of international trade in Kenya Common custom unions Removal trade barriers	By the end of the lesson, the learner should be able to -Explain future -Membership to regional -Trading blocks -External investments -Infrastructure -Bilateral -Trade agreement -Export promotion	Asking and answering questions Note taking	-Resource persons -textbook	-Certificate Geography form 4 student copy pg 182-184 -KLB secondary form four student book page 167-168 -Comprehensive Geography form 4 student book page 198- 200
	2-3	Trade	Regional trading blocks -COMESA -Aims and objectives -Achievements -Benefits -problems	By the end of the lesson, the learner should be able to -define trading blocks -discuss COMESA -state aims and objectives of COMESA -explain it's achievements -benefits and problems	-discussions -asking and answering questions -group discussions -taking notes -sketching maps	-text book -atlas -globe	-Certificate Geography form 4 student copy pg 185-187 -KLB secondary form four student book page 169-170 -Comprehensive Geography form 4 student book page 200- 204
	3	Trade	SADC -Roles -Membership	By the end of the lesson, the learner should be able to	-Teacher explaining the SADC & ECOWAS	-Text book -Atlas -globe	-Certificate Geography form 4 student copy pg 187-189

			ECOWAS -Objectives -roles	-discuss SADC & ECOWAS -stat the able activities of ECOWAS -Explain the roles of SADC and ECOWAS to member state	-Asking and answering questions -Taking notes -Sketching maps		-KLB secondary form four student book page 170-174 -Comprehensive Geography form 4 student book page204- 207	
	4-5	Trade	European Union (EU) Benefits of Regional trading blocks Problems facing trading problems	By the end of the lesson, the learner should be able to -Discuss the European Union -Explain general benefits of Regional trading blocs -Explain problems stating trading blocs	-Asking and answering questions -Taking notes -Teacher explaining the European union trading bloc	-Text book -Globe -Atlas (maps)	-Certificate Geography form 4 student copy pg 189-191 -KLB secondary form four student book page 174-179 -Comprehensive Geography form 4 student book page 207- 209	
7	1 & 2	Test	Revision Questions	By the end of the lesson, the learner should be able to -Answer questions	-Answering questions	-Foolscaps -pens	-Comprehensive Geography form 4 student book page 208 -Highflyer series geography revision 1995-2010 pg 182- 183	
	3-5	Population	Definition; Factors influencing population in East Africa (Physical factors Political Historical Economic Social Government Policy Infrastructure security	By the end of the lesson, the learner should be able to Define; -Population -Demography -Population density -Explain factors influencing -Distribution of population in East Africa	-Discussions -Asking and answering questions -Taking notes -Studying population Census data	-Text book -Statistical data	-Certificate Geography form 4 student copy pg 193-196 -KLB secondary form four student book page 177-180 -Comprehensive Geography form 4 student book page 209- 212	
8	1	Population	Factors influencing population growth -Fertility -mortality	By the end of the lesson, the learner should be able to explain how fertility and mortality and the way they	-explaining the terms mortality and fertility -making and taking notes -observing statistical data -collections -analyzing journals	-text book -statistical data -journals	Certificate Geography form 4 student copy pg 189-191 -KLB secondary form four student book page 198	

			influence population growth			-Comprehensive Geography form 4 student book page 212- 215	
2	Population	Migration -Causes of migration -Types -Effects -Pressure on land -Employment opportunities -Warfare -Calamities -Government policies	By the end of the lesson, the learner should be able to: -Define migration -Explain causes of migration -Explain the impacts of migration on population	-Taking notes -Asking and answering questions -Studying statistical data on census -Teacher explaining migration	-Text book -Wall charts -Journals -Population -Census data	-Certificate Geography form 4 student copy pg 198-204 -KLB secondary form four student book page 183-184 -Comprehensive Geography form 4 student book page 215	
3	Population	Population Growth CBR CDR Demographic Trends Factors leading to slow population growth rate -Warfare -Epidemics -Famine -Family planning practices -Late marriages -Emigration -Natural calamities -Social cultural factors	By the end of the lesson, the learner should be able to: -Define the terms - Crude Birth Rate - Crude Death Rate -Discuss the demographic trends -Explain factors leading to slow population Growth	-Asking and answering questions -Taking notes -Observing charts	-Text book -charts	-Certificate Geography form 4 student copy pg 198-204 -KLB secondary form four student book page 184-187	
4-5	Population	Population structure -Consequences of population growth and structure -GDP -Resources -Social facilities -Food production -Dependency and employment	By the end of the lesson, the learner should be able to -Define population structure -Explain consequences of population	-Asking and answering questions -Taking notes -Analyzing census population data -Download from internet	-Statistical data -Text book -Journals -newspapers	-Certificate Geography form 4 student copy pg 187-192 -KLB secondary form four student book page 205-208	

9	1-2	Population	Problems of slow population Growth -Number of people -Labour force -Market Expensive supply of resources Little revenue Limited investment differences	By the end of the lesson, the learner should be able to -Explain problems of slow population growth	-And answering questions -Taking notes -Analyzing census	-Statistical data -Text book -Journals -newspapers	-Certificate Geography form 4 student copy pg 208-212 -KLB secondary form four student book page 192	
	3	Population	Population in Kenya and Sweden Population growth in Kenya Factors influencing Kenya Rapid population growth -Cultural beliefs -Health service -Increased food production -Improved standards of living -religion	By the end of the lesson, the learner should be able to -compare the population growth in Kenya and Sweden -explain factors influencing rapid population growth	-asking questions -taking notes -analyzing journals -reading newspapers -analyzing maps and atlases	-text book -Journals -newspaper	-Certificate Geography form 4 student copy pg 212 -KLB secondary form four student book page 193 -Comprehensive Geography form 4 student book page 226- 228	
	4	Population	Population growth in Sweden Factors -Slow population growth -Factors influencing the distribution of population mountains -Climate -Drainage -Forests -Mining centers -urbanization	By the end of the lesson, the learner should be able to -explain factors that lead to slow population growth -explain factors influencing population distribution in Sweden	-statistical data on population analyzing -asking and answering questions -taking notes -analyzing journals analyzing maps and atlas	-download from internet on population -text book -journals -atlas -maps	-Certificate Geography form 4 student copy pg 213-215 -KLB secondary form four student book page 195-196 -Comprehensive Geography form 4 student book page 229- 231	

5	Population	Comparison between population in Kenya and Sweden -Similarities -differences	By the end of the lesson, the learner should be able to -compare population trends in Kenya and Sweden	-downloading population census data -asking and answering questions -taking notes	-statistical data -journals	-KLB secondary form four student book page 196-197 -Comprehensive Geography form 4 student book page 231			
MOCK EXAMINATIONS (MODELLED KCSE TIME TABLE)									

			GEOC	GRAPHY FORM	4 SCHEMES C	OF WORK - TE	CRM 3	
W K	LN	TOPIC	SUB-TOPIC	LEARNING OBJECTIVES	TEACHING/ LEARNING ACTIVITIES	TEACHING/ LEARNING RESOURCES	REFERENCES	RMKS
1	1-2	Settlement	Definition of settlement -Types of settlement -Rural -Urban Factors influencing location of settlement and patterns of settlement -Geographical -Economic defense -Government -Historical factors -Cultural practices	the learner should be able to -Define the terms settlement	-Watching films, videos and slides -Drawing sketches -Interpreting photographs -Asking and answering questions	-Resource persons -The field films -Videos -Slides -sketches	-Certificate Geography form 4 student copy pg 220 -KLB secondary form four student book page 198-199 -Comprehensive Geography form 4 student book page 234-236	
	2	Settlement	Settlement patterns -Nucleated -Dispersed linear	By the end of the lesson, the learner should be able to -Describe different settlement patterns	-Interpreting photograph -Asking and answering questions	-Text book -Photograph	-Certificate Geography form 4 student copy pg 220-222 -KLB secondary form four student book page 203-204 -Comprehensive Geography form 4 student book page 236- 238	
	3	Settlement	Distribution of major urban centers in East Africa -Transport -Capital towns -Cities -Sea ports -Lake ports -Mining towns -Industrial towns -Agriculture, -Administration -Tourism -Government Policy -population	By the end of the lesson, the learner should be able to explain the factors influencing growth of urban centres	-asking and answering questions -taking notes -maps & atlases -observations	-text books -maps & atlases	-Certificate Geography form 4 student copy pg 222-224 -KLB secondary form four student book page 206-207 -Comprehensive Geography form 4 student book page 238-242	

	4-5	Settlement	Factors influencing the growth of major urban centres in East Africa -Rural to urban migration -Natural growth of urban population -Infrastructure -Industrializa tion -Mining -Tourism -Agriculture -Administration	By the end of the lesson, the learner should be able to explain the factors influencing the growth of urban centres	-Asking and answering questions -Taking notes -Maps & atlases -observation	-maps -field atlas	-KLB secondary form four student book page 206-208
2	1 & 2	Settlement	Growth and functions of selected towns in Kenya -Thika -Kisumu	By the end of the lesson, the learner should be able to -Discuss the functions of Thika & Kisumu	-Atlases – observation -Maps -Taking notes -Field –work -Asking and answering questions -Sketching maps -Reading newspapers -journals	-atlases -maps -field	-Certificate Geography form 4 student copy pg 225-226 -KLB secondary form four student book page 208-209 -Comprehensive Geography form 4 student book page 242- 247
	3	Settlement	Eldoret	By the end of the lesson, the learner should be able to -Discuss the functions -Factors which led to development	-Observing the maps -Sketching maps -Taking notes -Asking and answering questions -Oral exposition	-Maps -Students book -Text book	-Certificate Geography form 4 student copy pg 227 -KLB secondary form four student book page 210-211 -Comprehensive Geography form 4 student book page 246- 247
	4-5	Settlement	Nairobi City -Factors influencing growth -Problems affecting Nairobi city -functions	By the end of the lesson, the learner should be able to -Discuss the functions -Factors which led to development	-Observing the maps -Taking notes -Asking and answering questions -Oral expositions	-Maps -Student book -Text book	-Certificate Geography form 4 student copy pg 228-237 -KLB secondary form four student book page 211-215 -Comprehensive Geography form 4 student book page 248- 252
3	1	Settlement	New-York City -Origin -Factors that led to the growth	By the end of the lesson, the learner should be able to	-asking and answering questions -taking notes -sketching maps -reading journals	-text book -journals -maps -photographs	-Certificate Geography form 4 student copy pg 228-237 -KLB secondary form four student book page 211-215

			-functions	-describe the new-york city -explain functions of new- york city	-observing photographs		-Comprehensive Geography form 4 student book page 248- 252	
	2-3	Settlement	-New-York City -Problems facing New York city -Comparison between Nairobi and New-York city	By the end of the lesson, the learner should be able to -Explain problems facing New-York city -Compare Nairobi City and New-York city	-Asking and answering questions -Taking notes -Sketching maps -Reading journals -Observing photographs	-Text book -Maps -Photographs	-KLB secondary form four student book page 217-218	
	4	Settlement	Related studies between Mombasa & Rotterdam Mombasa port Factors influencing the growth of Mombasa Deep well sheltered harbor -Modern port equipment -Large hinder land tourist & cultural centre	By the end of the lesson, the learner should be able to -Describe the port of Mombasa -Explain factors influencing it's growth	-Asking and answering questions -Taking notes -Observing Photographs -Taking photographs -Oral expositions -Listening to resource persons -Sketching diagrams (maps")	-Resource persons -Field photographs -Text book -Diagrams (maps)	-Certificate Geography form 4 student copy pg 234-237 -KLB secondary form four student book page 218-221	
	5	Settlement	Rotterdam -Origin -Factors leading to development -Functions -Comparison between Mombasa and Rotterdam ports	By the end of the lesson, the learner should be able to -describe Rotterdam -explain factors leading to it's development -explain its functions -Compare Mombasa Port and Rotterdam	-Observing Photographs -Sketching diagrams -Taking notes -Asking and answering questions	-Photographs -Diagrams -textbook	-Certificate Geography form 4 student copy pg 228-237 -KLB secondary form four student book page 222-224 -Comprehensive Geography form 4 student book page 261- 263	
4	1-2	Settlement	Effects of urbanizations -Congestion -Unemployment pressure on Social Amenities -Environment on degradation -Increased crime	By the end of the lesson, the learner should be able to -Explain the effects of urbanizations	-Taking photographs -Asking and answering questions -Taking notes	-Photographs -Text book	-Certificate Geography form 4 student copy pg 238-240 -KLB secondary form four student book page 225-226 -Comprehensive Geography form 4 student book page 264- 266	

	3	Managem ent and conservati on of the environme nt	-Breakdown of family units -Lack of housing -Urban sprawls Definitions -Environment -Management conservation -Need for environmental conservation and management	By the end of the lesson, the learner should be able to -Define environment management conservation -Explain the need for environmental conservation & management	-Refer from text book -Taking photographs -Asking and answering questions -Taking notes -Visiting fields & farms	-Photographs -Text book -Field -Farms	-Certificate Geography form 4 student copy pg 234-237 -KLB secondary form four student book page 218-221 -Comprehensive Geography form 4 student book page 264- 266
	4	Managem ent and conservati on of the Environm ent	Environment Hazards -Tropical cyclones -Earth quakes -Drought -Pest and diseases -Windstorms -Volcanic eruption -Toxic gases -Fins -Oil spills	By the end of the lesson, the learner should be able to -Define hazard -Explain different environmental hazards	-Taking photographs -Observing photographs -Visiting flood -Prone areas -Discussions	-Photographs -Text book -field	-Certificate Geography form 4 student copy pg 243 -KLB secondary form four student book page 231-234 -Comprehensive Geography form 4 student book page 270
	5		Impacts of selected hazards & measures of combating Flood	By the end of the lesson, the learner should be able to -Describe floods -Explain measures of combating floods	-Taking photographs -Observing photographs -Visiting flood -Prone areas -discussions	-Photograph -Text book	-Certificate Geography form 4 student copy pg 243-244 -KLB secondary form four student book page 237 -Comprehensive Geography form 4 student book page 270- 273
5	1		Lighting Windstorm Pests and diseases	By the end of the lesson, the learner should be able to -Describe hazards -Explain measures combating lighting	Discussions Asking and answering questions Taking notes Observing photographs	-Photograph -Text book	-Certificate Geography form 4 student copy pg 245-246 -KLB secondary form four student book page 237-241 -Comprehensive Geography form 4 student book page 273- 278
	2		Pollution		-Observing photographs	-Photographs -Text book	-Certificate Geography form 4 student copy pg 247-251

&	-Water	By the end of the lesson,	-Asking and answering		-KLB secondary form four			
3	-Soil	the learner should be able	questions		student book page 241-246			
	-Noise	to	-Taking notes		-Comprehensive Geography			
	Measures of combatin	g -Describe the pollution			form 4 student book page 281-			
	polluting	-Water			286			
		-Soil						
		-Air						
		-Noise						
		Explain measure of						
		combating pollution						
			-Asking and answering	Text book	-Certificate Geography form 4			
4-5	Environment	By the end of the lesson,	questions		student copy pg 252-255			
	management and	the learner should be able	-Taking notes		-KLB secondary form four			
	conservation in Kenya				student book page 246-250			
	-Legislation	-Explain environmental			-Comprehensive Geography			
	-Education	management and			form 4 student book page 286-			
	-Research	conservation			290			
	-Rehabilitation of				270			
	derelict land							
WEEK 6-13 REVISION AND TAKING OF NATIONAL EXAMS								