

<b>SCHEME OF WORK</b> <b>FORM FOUR GEOGRAPHY</b> <b>TERM ONE</b>							
WK NO	L/ NO	TOPIC/ SUBTOPIC	LESSON / SPECIFIC OBJECTIVES	TEACHING / LEARNING ACTIVITIES	MATERIALS / RESOURCES	REF.	REM.
1	1	<b>STATISTICAL METHODS OF PRESENTING DATA</b>  Age- sex pyramids.	<i>By the end of the lesson, the learner should be able to:</i>  Define the term cohort. Recall steps for constructing an age-sex pyramid.	Q/A: review previously studied statistical methods of presenting data. Examine population census results of age and sex. Teacher explains construction of an age-sex pyramid.	Census results.	KLB BOOK IV  Pg 1-2	
	2	Age- sex pyramids.	<i>By the end of the lesson, the learner should be able to:</i> Construct an age-sex pyramid.	Supervised practice; Written exercise.	Tabulated data.	Pg 2-3	
	3  4	Analysis and interpretation of age-sex pyramids.  Advantages and disadvantages of age-sex pyramids	<i>By the end of the lesson, the learner should be able to:</i> Analyse and interpret age-sex pyramids. State advantages and disadvantages of presenting data in form of age- sex pyramids.		Charts – types of age- sex pyramids.	Pg 2-3	

	5	Dot maps/ Distribution maps.	<i>By the end of the lesson, the learner should be able to:</i> Explain factors taken into consideration when constructing a dot map.	Expository approach: Teacher explains significance of dot value, dot size and dot location. Simple calculations.		<i>Pg 3-4</i>	
2	1-2	Constructing dot maps.	<i>By the end of the lesson, the learner should be able to:</i> Construct dot maps.	Exposition of steps for constructing dot maps. Practical activity- making dot maps. Supervised practice.	<i>Calculators, tabulated data.</i>	<i>Pg 4-5</i>	
	3	Advantages & disadvantages of dot maps.	State advantages & limitations of dot maps.	Review previous assignment. Brief discussion on construction of dot maps. Assignment.		<i>Pg 5</i>	
	4	Choropleth maps.	Draw a choropleth map.	Teacher exposes and explains new concepts related to choropleth maps. Written exercise.		<i>Pg 6-7</i>	
	5	Advantages & disadvantages of choropleth maps.	State advantages & disadvantages of chloropleth maps.	Probing questions; Brief discussion.		<i>Pg 7</i>	
3	1	<b>LAND RECLAMATION</b> Introduction. Irrigation schemes in Kenya.	Define the terms land reclamation and land rehabilitation. Identify various irrigation schemes in Kenya.	Probing questions related less useful land; Brief discussion.	<i>Map: distribution of irrigation schemes in Kenya.</i>	<i>Pg 9-10</i>	
	2	Mwea-Tebere irrigation scheme.	State factors influencing location of the scheme. Describe establishment of the scheme.	Probing questions; Detailed discussion on case study.		<i>Pg 10-11</i>	

	3	Perkerra irrigation scheme.	State factors influencing location of the scheme. Describe establishment of the scheme.	Probing questions; Detailed discussion on case study.		<i>Pg 11-12</i>	
	4	Significance of irrigation farming in Kenya.	Outline significance of irrigation farming in Kenya.	Q/A & brief discussion.		<i>Pg 12-13</i>	
	5	Problems associated with irrigation farming in Kenya.	Outline the problems associated with irrigation farming in Kenya.	Brain storming; Q/A & brief discussion.			
4	1	<b>Methods of land reclamation.</b>  Irrigation.	Outline types of irrigation.	Exposition of new concepts; Brief discussion.		<i>Pg 14-15</i>	
	2	Drainage of swamps & pest control.	Describe drainage of swamps, control of floods & pest control as methods of land reclamation.	Detailed discussion with probing questions.		<i>Pg 13,15</i>	
	3	Other methods of land reclamation.	Explain other methods of land reclamation.	Exposition of new concepts; Probing questions; Brief discussion.		<i>Pg 16-18</i>	
	4-5	Land reclamation in the Netherlands.	Outline methods of land reclamation in the Netherlands. Describe land rehabilitation in the Netherlands; State the benefits of the <b>Zuyder Zee project</b> .	Expository approach & case studies on <b>Zuyder Zee project</b> .  Brief discussion on benefits of the projects.	<i>World map: location of the Netherlands.</i>	<i>Pg 18-19</i>	

5	1-2	Land reclamation in the Netherlands.	Highlight features of <b>Delta Plan</b> project. State the benefits of the <b>Delta Plan</b> project.	Expository approach & case studies on <b>Delta Plan</b> project. Brief discussion on benefits of the project; Topic review questions.		<i>Pg 20-21</i>	
5	3	<b>FISHING</b> Factors influencing fishing.	Define the terms fishing and fish-farming. Outline factors influencing fishing.	Q/A and brief discussion on influence of presence of planktons, ocean currents, nature of coastline, capital, market and transport. Assignment.	<i>Map- ocean currents of Africa.</i>	<i>Pg 22-23</i>	
	4, 5	Types of fish & Methods of fishing.	Identify types of fish. Outline methods of fishing. State advantages & disadvantages of specific methods of fishing.	Teacher exposes and explains new concepts related to types of fish and fishing methods. Probing questions on advantages & disadvantages of each method.		<i>Pg 25-28</i>	
6	1	Major fishing grounds in the world. - Atlantic fishing grounds.	Account for the extensive and highly developed fish farming in the Atlantic fishing grounds.	Discussion on Atlantic fishing grounds.	<i>Illustrative maps.</i>	<i>Pg 28-32</i>	
	2-3	- Pacific fishing grounds.	Account for the extensive and highly developed fish farming in the Pacific fishing grounds.	Discussion on Atlantic fishing grounds; N.E. Asia, West America.	<i>Illustrative maps.</i>	<i>Pg 32-33</i>	
	4	Fishing grounds in Africa.	Identify major fishing grounds in Africa.	Descriptive approach.  Assignment method.	<i>Illustrative maps – fishing grounds in Africa.</i>	<i>Pg 33-35</i>	

	5	Fishing in Kenya.	Describe marine fishing and inland fishing in Kenya.	Q/A & brief discussion. Superficial case studies.	<i>Map: drainage system in Kenya.</i>	<i>Pg 35-38.</i>	
7	1-2	Fish farming in Kenya.	Cite significance of fish farming in Kenya and reasons why it should be encouraged. State advantages & disadvantages of fish farming compared to other farming methods. Describe establishment of fish farming in Kenya.	Brain storming, Brief discussion.		<i>Pg 38-40</i>	
	3	Problems associated with fishing industry in Kenya.	Identify problems associated with fishing industry. Suggest possible solutions to the problems.	Brain storming, Brief discussion.		<i>Pg 44-47</i>	
	4, 5	TEST & MID –TERM BREAK					
8	1	Management and conservation of fisheries in Kenya.	Outline some measures involved in the management and conservation of fisheries in Kenya.	Brief discussion on management and conservation measures.			
	2	Fishing in Tanzania.	Describe marine fishing and inland fishing in Tanzania.	Q/A & brief discussion. Superficial case studies.	<i>Map: drainage system in Tanzania.</i>	<i>Pg 40-41</i>	
	3	Fishing in Uganda.	Describe marine fishing and inland fishing in Uganda.	Q/A & brief discussion. Superficial case studies.	<i>Map: drainage systems in Uganda.</i>	<i>Pg 41-43</i>	
	4-5	Fishing in Japan.	Account for establishment and development of fishing in Japan.	Case study.	<i>Map showing location of Japan.</i>	<i>Pg 47-48</i>	

9	1	<b>WILDLIFE AND TOURISM</b>  Distribution of wildlife in East Africa.	Explain the factors influencing distribution of wildlife in East Africa.	Detailed discussion.  Q/A and brief discussion.	<i>Map: distribution of major game parks in East Africa.</i>	<i>Pg 50-52</i>	
	2	Game Parks in East Africa.	Identify major national parks, national reserves and game sanctuaries in East Africa.	Locating Game Parks in East Africa on the map; Discuss distribution of the Game Parks.		<i>Pg 52-53</i>	
	3	Significance and problems facing Wildlife in East Africa.	Outline the significance of wildlife in East Africa. Outline problems facing wildlife in East Africa. Suggest possible solutions to the problems.	Oral questions; Explanations and open discussion.		<i>Pg 54-57</i>	
	4-5	Management and conservation of wildlife in East Africa.	Highlight some of the measures being taken to conserve wildlife in East Africa.	Probing questions & discussion.	<i>Newspaper cuttings.</i>	<i>Pg 57-59</i>	
10	1	<b>Tourism:</b> Introduction.  Factors of tourism in Kenya.	Define the terms tourism, eco-tourism, domestic tourism and international tourism. Explain factors influencing tourism in Kenya.	Probing questions; Exposition of new terms.  Detailed discussion.		<i>Pg 59-64</i>	
	2	Tourist attractions in Kenya.	Identify tourist attractions in Kenya.	Give specific examples of tourist attractions.		<i>Pg 64-69</i>	
	3 4	Significance of tourism. Problems associated with tourism.	Outline benefits of tourism to Kenya.  Identify problems associated with tourism.	Give specific examples of tourism benefits. Give specific examples of problems associated with tourism.	<i>Newspaper extracts.</i>	<i>Pg 69-73</i>	

	5	Tourism in Switzerland.	Account for development of tourism industry in Switzerland.	Superficial case study.	<i>Map: location of Switzerland.</i>	<i>Pg 71</i>	
11	1	<b>ENERGY</b>  Renewable sources of energy.	Identify renewable sources of energy.	Probing questions;  Brief discussion.		<i>Pg 75-80</i>	
	2	Non- renewable sources of energy	Identify non- renewable sources of energy.	Brain storming;  Brief discussion.		<i>Pg 80-82</i>	
	3-4	H.E.P. stations & geothermal stations in Kenya.	Describe establishment and development of H.E.P. & geothermal stations in Kenya.	Brain storming;  Brief discussion.	<i>Map: HEP stations in Kenya.</i>	<i>Pg 83-85</i>	
	5	H.E.P. stations in Uganda.	Describe establishment and development of H.E.P. stations in Uganda.	Brief discussion.	<i>Map: HEP stations in Kenya.</i>	<i>Pg 85-86</i>	
12-13	<b>END OF TERM ONE EXAMINATIONS</b>						

	<b>SCHEME OF WORK      FORM FOUR GEOGRAPHY      TERM TWO</b>						
WK NO.	L/ NO.	TOPIC/ SUBTOPIC	LESSON / SPECIFIC OBJECTIVES	TEACHING / LEARNING ACTIVITIES	MATERIALS / RESOURCES	REF.	REM.
1	1	Geothermal power projects in Africa.	Identify major geothermal power sites in Africa.	Brief case study on Kariba and Akosombo dams.	<i>Map- HEP power projects in Africa.</i>	<i>Pg 86-87</i>	
	2	Energy crisis.	Explain some emerging issues related to energy crisis.	Brief discussion & probing questions.		<i>Pg 89-90</i>	

	3-4	Management and conservation of energy.	Outline measures taken to manage and conserve energy.	Brief discussion with probing questions. Review questions.		<i>Pg 91</i>	
	5	<b>INDUSTRY</b>  Introduction. Definition and importance.	Define the terms industry and industrialization. Give reasons why industrialization is essential.	Brain storming;  Discussion.		<i>Pg 93-97</i>	
2	1	Types of industries.	Describe the main types of industries in Kenya.	Give examples of each type		<i>Pg 98-102</i>	
	2	<i>Jua kali</i> industries.	Explain the role of <i>jua kali</i> industries in the growth of an economy.	Oral questions, brief discussion.		<i>103- 107</i>	
	3-4	Distribution of Agricultural industries in Kenya.	Describe the distribution of Agricultural industries in Kenya.	Cite specific examples and the materials dealt in.			
	5	Distribution of non-agricultural industries in Kenya.	Describe the distribution of non-agricultural industries in Kenya.	Cite specific examples and the materials dealt in.			
3	1,2	Significance of industrialization in Kenya.	Highlight the significance of industrialization in Kenya.	Oral questions, brief discussion.			
	3,4	Problems facing industrialization & industries in Kenya.	Identify problems facing industrialization & industries in Kenya. Suggest possible solutions to the problems.	Q/A & brief discussion.		<i>Pg 104-5</i>	



	5	Cottage industry in India.	Describe cottage industry in India. Explain the success of cottage industry in India.	Brief discussion.  Give examples of activities in Cottage industry.	<i>Map: industrial centers of India &amp; Germany.</i>	<i>Pg 104-7</i>	
4	1,2	Iron & steel industry in the Ruhr region.	Explain factors that have led to development of iron & steel industry in the Ruhr region of Germany.	Expository approach with specific examples.		<i>Pg 113</i>	
	3,4 5	Car manufacturing & Electronics industry in Japan.	Explain factors that have led to development of car manufacturing & electronics industry in Japan.	Expository approach with specific examples.	<i>Maps: Japan's major industrial centres.</i>	<i>Pg 116-118</i>	
5	1-2	<b>TRANSPORT &amp; COMMUNICATION.</b> Introduction.  Road transport.	Define the terms transport, communication & tele-communication. State advantages & disadvantages of road transport. Identify problems facing road transport. Suggest ways of combating these problems.	Brainstorming, brief discussion;	<i>Pg 120-21</i>		
	3	Railway transport.	State advantages & disadvantages of railway transport. Identify problems facing railway transport in Africa.	Oral questions, brief discussion.	<i>Pg 121-2</i>		

	4	Water transport.	Cite reasons for development of water transport in Africa. State advantages & disadvantages of water transport. Identify problems facing water transport in Africa.	Q/A ,brief discussion.		<i>Pg 123-4</i>	
	5	Air transport.	Cite reasons for development of air transport in Africa. State advantages & disadvantages of air transport. Identify problems facing air transport in Africa.	Q/A, brief discussion.	<i>Maps: major airports in Africa.</i>	<i>Pg 124 -5</i>	
6	1	C.A.T. & MID –TERM BREAK					
	2	Pipelines, lifts & escalators.	State advantages & disadvantages of pipelines, lifts & escalators.	Brief discussion, Q/A.		<i>Pg 126</i>	
	3	Types of communication systems.	Identify types of communication systems in Africa.	Q/A, discussion & exposition of new concepts e.g. Facsimile, internet and e-mail.		<i>Pg 127-8</i>	
	4	Major lines of transport in Africa.	Identify major lines of transport in Africa.	Locate major roads, railway lines, airlines and waterways on a map.	<i>Illustrative maps.</i>	<i>Pg 129</i>	
	5	Role of transport & communication.	Explain the role of transport & communication in the economic development of Africa.	Brainstorming, probing questions & discussion.		<i>Pg 134-8</i>	

7	1	Problems facing transport and communication in Africa.	Identify major problems facing transport and communication in Africa. Highlight efforts being made to combat these problems.	Probing questions & discussion.		136-7	
	2,3	Great Lakes and St. Lawrence Seaway.	Identify the Great Lakes of North America. List down aims of St. Lawrence Seaway project.	Brief case study on of St. Lawrence Seaway project.	<i>Map: Great Lakes and St. Lawrence Seaway.</i>	<i>Pg 140-1</i>	
	4-5	Great Lakes and St. Lawrence Seaway.	Enumerate benefits of the project. Identify the role of the projects in the economies of USA and Canada.	Brief case study on of St. Lawrence Seaway project.		<i>Pg 140-1</i>	
8	1	<b>TRADE</b> Types of trade.	Identify and describe types of trade.	Brainstorming, probing questions and discussion on types of trade.		<i>Pg 143-5</i>	
	2	Factors influencing trade.	Identify factors that make trade possible.	Q/A & Discussion.		<i>Pg 146-7</i>	
	3	Significance of trade to Kenya.  Problems facing trade in Kenya.	Explain the significance of trade to Kenya.  Identify major problems facing trade in Kenya.	Oral questions, brief discussion.	<i>Balance of trade charts.</i>	<i>Pg 149-152</i>	
	4-5	Regional Trade Blocs.	Describe establishment of regional trade blocs. Identify member countries of Regional Trade Blocs. Highlight benefits of Regional Trade Blocs. Identify problems facing Regional Trade Blocs.	Descriptive approach on COMESA, SADC, and AU.  Assignment.		<i>Pg 154-6</i>	

9	1-2	Regional Trade Blocs. (contd)	Describe establishment of regional trade blocs. Identify member countries of Regional Trade Blocs. Highlight benefits of Regional Trade Blocs. Identify problems facing Regional Trade Blocs.	Descriptive approach of discussing WTO, ECOWAS, AGOA		<i>Pg 146 - 8</i>	
	3	<b>POPULATION</b> Population distribution in East Africa.	Define the term demography. Explain factors influencing population distribution in East Africa.	Brain storming. & discussion.		<i>Pg 162-165</i>	
	4	Population growth.	Explain factors that influence population growth.	Exposition and explanation of new terms e.g. fertility, fecundity, mortality, milieu variables, e.t.c		<i>Pg 165-6</i>	
	5	Tools of detecting population growth.	Identify tools of detecting population growth.	Brief discussion on census and sample surveys.		<i>Pg 166-8</i>	
10	1	Migration.	Identify causes of migration. Identify types of migration.	Q/A & discussion.		<i>Pg 168-9</i>	
	2	Crude birth rate & crude death rate.	Define the terms crude birth rate & crude death rate. Calculate crude birth rate & crude death rate.	Exposition of new concepts; Worked examples; Problem solving.		<i>Pg 172-3</i>	
10	3-4	Population trends.	Explain the population transition theory. Identify the four demographic transition phases.	Probing questions & expository approach: Teacher exposes and explains the new concepts relating to demographic trends.	<i>Chart: demographic trends.</i>	<i>Pg 173-4</i>	

	5	Slow population growth rate.	Identify factors leading to slow population growth rate. Highlight problems associated with slow population growth rate.	Q/A, brief discussion on effects of famine, epidemics, FP practices, emigration, etc.		<i>Pg 175-6</i>	
11	1	Population growth in Kenya.	Explain factors influencing Kenya's rapid population growth rate.	Examine actual population growth figures. Discussion and questioning.		<i>Pg 176-9</i>	
	2-3	Population structure in Kenya.	Describe structure of Kenya's population.	Examine population pyramids; Discuss observations.		<i>Pg 178-9</i>	
	4	Consequences of Kenya's rapid population growth rate.	Explain the socio-economic consequences of Kenya's rapid population growth rate.	Probing questions, open discussion.	<i>Population census results/ population fact file.</i>	<i>Pg 180-3</i>	
	5	Distribution of population in Sweden.	Identify factors influencing distribution of population in Sweden. Highlight factors contributing to slow growth population rate in Sweden.	Discussion: comparative view on Kenya's and Sweden's populations.  Assignment.		<i>Pg 184-5</i>	
12-13		<b>END OF TERM TWO ASSESSMENT TEST</b>					

	<b><i>SCHEME OF WORK                      FORM FOUR GEOGRAPHY                      TERM THREE</i></b>						
	<b>L/ NO.</b>	<b>TOPIC/ SUBTOPIC</b>	<b>LESSON / SPECIFIC OBJECTIVES</b>	<b>TEACHING / LEARNING ACTIVITIES</b>	<b>MATERIALS / RESOURCES</b>	<b>REF.</b>	<b>REM.</b>

1	1	<b>SETTLEMENT</b>  Types of settlements.	Define the term settlement. State types of settlements.	Probing questions; discussion.		<i>Pg 186-7</i>	
	2	Location and patterns of settlements.	Explain factors influencing location and patterns of settlements.	Q/A & discussion on geographical, economical factors, cultural factors etc.		<i>Pg 187-191</i>	
	3-4	Patterns of settlement.	Identify various patterns of settlement.	Exposition & explanations on: nucleated, linear, dispersed and other complex settlement patterns.		<i>Pg 191-2</i>	
	5	Major urban centres in East Africa.	Identify categories of urban centres in East Africa; and give examples in each case.	Brief discussion giving specific examples.	Map: major East Africa urban centers.	<i>Pg 193-4</i>	
2	1	Growth of major urban centers in East Africa.	Explain factors influencing growth of major urban centers in East Africa.	Brief discussion.		<i>Pg 195-6</i>	
	2	Thika as an industrial centre.  Kisumu as a lake port.	Outline factors favouring growth of Thika as an industrial centre. Identify problems facing Thika as an industrial centre.  Outline factors favouring Kisumu as a lake port. Identify problems facing Kisumu as a modern lake port.	Case studies.		<i>Pg 198-9</i>	

	3	Eldoret as an agricultural collecting centre and administrative centre.	Outline factors favouring Eldoret as an agricultural collecting centre and administrative centre.  Identify problems facing Eldoret as an agricultural collecting centre and administrative centre.	Q/A; Case study; Assignment.		<i>Pg 200-1</i>	
	4-5	Nairobi City.	Trace the growth of Nairobi to city status. Outline factors favouring growth of Nairobi. Identify problems facing Nairobi as a city.	Probing questions & brief discussion. Case study.		<i>Pg 201-4</i>	
3	1	New York City.	Outline factors influencing growth of New York city. Identify problems facing New York City.	Probing questions & brief discussion. Case study.		<i>Pg 204-7</i>	
3	2-3	Mombasa.	Trace history and growth of Mombasa. Outline factors influencing growth of Mombasa. Identify problems faced by Mombasa as a city.	Exposition, explanations and discussion.		<i>Pg 207-211</i>	
	4	Rotterdam.	Identify factors leading to growth of Rotterdam to an international port.	Exposition & explanations.		<i>Pg 211-2</i>	
	5	Effects of urbanization.	Outline effects of urbanization.	Brain storming; Discussion.		<i>212-5</i>	

4	1	<b>MANAGEMENT &amp; CONSERVA- TION OF THE ENVIRONMENT</b>  Introduction. Environmental conservation.	Define the terms environment, social environment, ecosystem, biodiversity, and environmental management. Give reasons for conserving the environment	Probing questions, exposition of new concepts & explanations.		<i>Pg 216-8</i>	
	2	Specific environmental hazards.	Describe some methods of combating floods, lightning, windstorms, pests and diseases.	Q/A, discussion, exposition of new concepts.		<i>Pg 224-230</i>	
	3-4	Pollution.	Describe air pollution, water pollution and sound & land pollution. Explain ways of combating pollution.	Examples of gases / activities leading to pollution; Discussion.		<i>Pg 230-235</i>	
	5	Environmental conservation measures in Kenya.	Outline measures carried out to manage and conserve the environment.	Q/A, brief discussion on public awareness, public education, legislation, the Water Act, and other Acts etc.		<i>Pg 236-240</i>	
		<b><i>K.C.S.E / REVISION</i></b>					
		<b><i>K.C.S.E.</i></b>					