SCHEMES OF WORK 2022

AGRICULTURE FORM 1

TERM 1-3

FOR MORE CUSTOMIZED SCHEMES OF WORK CALL OR WHATSAAP SIR DERRICK ON 0701256166

SCHEME OF WORK FORM ONE AGRICULTURE TERM ONE 2022

WK NO	L/ NO	TOPIC/ SUBTOPIC	LESSON / SPECIFIC OBJECTIVES	TEACHING / LEARNING ACTIVITIES	MATERIALS / RESOURCES	*REF.*	REM.
1	1	**INTRODUCTION TO AGRICULTURE** Introduction.	**By the end of the lesson, the learner should be able:** To define Agriculture as an art and a science.	Brainstorming: Teacher elicits the definition of Agriculture.	Chart- Branches of Agriculture.	*KLB Pages 1-3* *LONGHORN Pages 1-2*	
	2	Branches of Agriculture.	To describe the branches of Agriculture.	Discussion- Branches of Agriculture: crop farming, livestock farming, Agricultural Economics, Agriculture Engineering, e.t.c.	Livestock / Crop products.	*CERT.AGRIC Pages 1-3*	
	3	Importance of Agriculture.	To explain the importance of Agriculture.	Brain storming, guided questions and detailed discussion.	Livestock / Crop raw produce, industrial goods, flow charts.	*CERT.AGRIC Pages 3-4.*	
2	1	Problems facing Agriculture.	To state and explain problems facing Agriculture and suggest possible solutions.	Brain storming, guided questions and detailed discussion.		*CERT.AGRIC Page 4.*	
	2	Farming Systems.	To define a farming system. To identify factors that affect choice of a farming system.	Teacher exposes the meaning of a farming system. Discussion on factors that affect choice of a farming system.		*KLB Pages 5-6* *LONGHORN Pages 6-7* *CERT.AGRIC Page 5*	
	3	Farming systems in Kenya.	To describe various farming systems practised intensively.	Q/A & Discussion: - Arable farming. - Small-scale farming.		*LONGHORN Pages 7-9*	

3	1	Intensive farming systems.	To state advantages and disadvantages of each type of intensive farming.	- Subsistence farming Q/A & Discussion: -commercial farming. -Intercropping.		*CERT.AGRIC Page 6.*	
	2	Extensive farming systems. Advantages and disadvantages of extensive farming system.	To describe various farming systems practised extensively. To state advantages and disadvantages of each type of extensive farming.	Discussion: - Dairy farming - Large-scale farming - Ranching - Plantation farming. Q/A and explanations.	Relevant photographs: plantations, ranches, dairy farms.	*KLB Pages 5-6.* *LONGHORN Page 7.*	
	3	Methods of farming. Mixed farming.	To define mixed farming. To state advantages and disadvantages of mixed farming.	Probing questions. Discussion- factors favouring / militating against mixed farming.		*KLB Pages 6,7,& 8* *LONGHORN Pages 9-13*	
4	1	Nomadic Pastoralism & Shifting cultivation. .	To define nomadic pastoralism. To state advantages and disadvantages of nomadic pastoralism. To define shifting cultivation. To state advantages and disadvantages of shifting cultivation.	Probing questions. Discussion- factors favouring / militating against pastoralism. Exposition; Discussion.		*CERT. AGRIC Pages 7-9*	
	2	Organic farming. Agroforestry.	To define organic farming. To state advantages and disadvantages of organic farming. To define agroforestry.	Probing questions. Discussion: factors favoring / militating against organic farming / organic farming.	Specimens of organic manures. Specimens of agroforestry trees, Charts & photographs.	*CERT. AGRIC Pages 8-9*	

	3	FACTORS INFLUENCING AGRICULTURE *Human factors.*	To explain the human factors influencing Agriculture.	Detailed discussion and probing questions on: Health (*emphasis on HIV/AIDS*), education level, communication, economic development, marketing, government policies, e.t.c.	Data on HIV/AIDS.	*K.L.B.* *Pgs 11- 15*	
5	1	*Climatic factors.* - Rainfall.	To discuss at length influence of rainfall on Agriculture. To identify farming practices that: - Reduce effects of water shortage. - Overcome effects of excess water.	Q/A and explanations about: rainfall i.e. lack of rainfall, excess rainfall, rainfall intensity, distribution and reliability. Exposition and explanations.	Weather station instruments: *rain gauge.*	*KLB* *Page 18* *CERT.AGRIC* *Page13* *LONGHORN* *Pgs 24-32.*	
	2	- Temperature.	To define cardinal temperature range, maximum and minimum temperature, optimum temperature. To identify factors that cause temperature variations. To explain ways in which plants/ animals overcome extreme temperatures.	Exposition and explanation. Discussion and Q/A on; altitude, latitude, seasons, winds, clouds, slope, e.t.c. Students highlight ways in which plants / animals overcome extreme temperatures, then the teacher delves into the details.	Thermometers.	*KLB* *Page 19.* *CERT. AGRIC* *Page 16.* *LONGHORN* *Pages 24-32.*	
	3	**HALF**	**TERM**	**BREAK**			
6	1	- Light.	To state functions of light. To describe characteristics of light.	Q/A: Functions of light. Exposition & Discussion: Light intensity, duration and wavelength.		*KLB* *Page 21.* *CERT. AGRIC* *Page 18.* *LONGHORN* *Pgs 24-32.*	

	2	- Wind and Relative Humidity.	To identify effects of wind on agricultural production. To explain relation between relative humidity and rate of evapotranspiration.	Q/A: Uses and nuisances of wind. Exposition: Meaning of relative humidity. Discussion: Relative humidity v/s rate of evapotranspiration.		*KLB Page20.* *CERT. AGRIC Page 20.*	
	3	Biotic factors.	To explain effects of biotic factors on Agriculture.	Q/A and explanations on effects of: pests, diseases, pathogens, predators, pollinators, bacteria, e.t.c. on Agriculture.	Wall charts / Sample pests and pollinators.	*KLB Pages 16-17.* *CERT. AGRIC Pages 20-21.* *LONGHORN Pages 16-21.*	
7	1	Edaphic factors.	To define soil. To state uses of soil. To identify forms of weathering.	Q/A and explanation: definition of soil, its uses. Exposition: Teacher exposes meaning of weathering and forms of weathering.	Soil / rock samples.	*KLB Page 22.* *CERT. AGRIC Page 21.* *LONGHORN Pages 33-60*	
	2	Soil profile.	To define soil profile. To represent soil profile diagrammatically. To explain effects of soil profile on crop production.	Exposition – Definition. Drawing and labelling soil horizons. Explanation and questioning: soil horizons v/s crop production.	Chart – Soil profile.	*KLB Page30.* *CERT. AGRIC Pages 27-28.* *LONGHORN Pages 33-60.*	
	3	Soil constituents & sedimentation.	To identify constituents of soil.	Group experiments-To show soil sedimentation. *(Left overnight).*	Measuring cylinder, Water, Sample of garden soil, Sodium carbonate.	*KLB Pages 32-34.* *CERT. AGRIC Page 30.*	

	3	Soil texture.	To define soil texture. To identify textural classes of soil. To identify types of soils.	Group experiment- Mechanical analysis of soil. Discuss the results. Expose meaning of soil texture.	Sieve meshes of different diameters, Beakers, Garden soil, Weighing balance.	KLB Pages 46-49. CERT.AGRIC Page 38. LONGHORN Pages 33-60.	
8	1	Water retention of soils.	To describe an experiment to show: - Water retention of soils. - Capillary rates of different soils.	Group experiments. Discussion of observations.	Sandy, Loam, Clay soil Cotton wool Funnels Stop watches Rulers Measuring cylinders.	KLB Pages 52-53. CERT. AGRIC Page 46.	
	2	Effect of soil water holding properties on crop production.	To explain the effects of soil water holding properties on crop production.	Q/A and explanation about soil aeration and drainage and their influences on growth of crops.		KLB Pages 52-53. CERT. AGRIC Page 46.	
	3	Soil structure.	To define soil structure. To identify types of soil structure. To identify mans influence on soil structure. To explain effects of soil structure on crops.	Detailed discussion. Drawing of diagram- soil horizons. Q/A: Man's influence on soil structure. Q/A: Soil structure v/s Crop production.	Chart- soil structure forms.	KLB Page 41. CERT. AGRIC Page 40. LONGHORN Pages 33-60	
9-10		**END OF TERM ONE ASSESSMENT TEST**					

SCHEME OF WORK FORM ONE AGRICULTURE TERM TWO 2022							
WK NO	**L/ NO**	**TOPIC/ SUBTOPIC**	**LESSON / SPECIFIC OBJECTIVES**	**TEACHING / LEARNING ACTIVITIES**	**MATERIALS / RESOURCES**	***REF.***	**REM.**
1	1	Soil chemical properties.	To describe chemical properties of soil. To explain the influence of chemical properties of soils on crop production.	Teacher exposes new concepts e.g. carbon acid in the soil. Group experiments – Soil pH ranges. Discuss the observations. Explanations and questioning.	Litmus papers, Bromothymol blue, Universal indicator, pH meters.	KLB Page 55. LONGHORN Pages 33-60.	
	2	**FARM TOOLS AND EQUIPMENT** Crop production tools.	To distinguish farm tools from farm equipment. To identify farm tools and equipment and state their uses.	Drawing garden tools. Identifying real tools, such as pruning fork, leveling boards, knap-sack sprayer, soil auger, e.t.c	Chart – Tools that are not common. .	KLB Pages 59-63. CERT. AGRIC Pages 48-52 LONGHORN Pages 62-63	
	3	Classification of farm tools and equipment. Maintenance of farm tools and equipment	To classify tools on basis of their uses. To state practices of maintenance of the tools.		Common farm tools, school farm	KLB Pages 59-63. CERT. AGRIC Pages 48-52 LONGHORN Pages 62-63	

	1	Livestock production tools and equipments.	To identify livestock production tools and equipment. To state purposes of livestock production tools and equipment. To label diagrams of important tools. To state practices of maintenance of the tools.	Drawing/ identifying the elastrator, hoof trimmer, strip cup, teeth clipper, drenching gun, chaff cutter, dehorning wire, bolus gun and others. Discussion: Maintenance practices of identified parts of the tools.	Chart-Uncommon tools: elastrator, hoof trimmer, strip cup, teeth clipper, drenching gun, chaff cutter, dehorning wire, bolus gun and others.	KLB Pages 63-75. CERT. AGRIC Pages 54-59. LONGHORN Pgs 63-73.	
2	2	Workshop tools and equipment.	To identify common workshop tools and equipments. To identify practices of maintaining the workshop. To state general safety precautions to be observed in a work shop.	Drawing / identifying Common workshop tools/ masonry tools: saws, planes, hammers, pliers, spoke shave, files, rasps, G-clamp, tin snip, e.t.c Q/A: Maintenance practices.	Saws, planes, hammers, pliers, spoke shave, files, rasps, G-clamp, tin snip	KLB Pages 94-97.	
	3	Measuring tools.	To identify common measurement tools and equipments. To identify practices of maintaining the measuring tools.	Drawing / identifying common measurement tools: tape measure, plumb bob, T-square, spirit level, marking gauge.	Common measurement tools: tape measure, plumb bob, T-square, spirit level, marking gauge.	KLB Pages 82-85.	
3	1	**CROP PRODUCTION 1** Land Clearing.	To explain importance of land clearing. To identify tools for land clearing..	Brainstorming, Q/A & Discussion.	Tools / photographs of tools used in land clearing.	KLB Page 109. CERT. AGRIC. Page 81	
	2	Land preparation.	To explain importance of land preparation. To identify methods of land preparation. To identify tools for land preparation.	Brainstorming, Q/A & Discussion.	Tools / photographs of tools used in land prep.		

	3	Primary cultivation. - Hand cultivation.	To state advantages and disadvantages of hand cultivation. To relate hand cultivation to correct tools and equipment.	Q/A: Advantages and disadvantages of the cultivation methods discussed. Discussion: Choice of equipment for primary cultivation.	Tools / photographs of tools used in hand cultivation.	KLB Page 106. CERT. AGRIC Page 77-78. LONGHORN Page 103.	
4	1	Secondary cultivation.	To state aims of secondary cultivation. To state factors affecting number of secondary cultivation carried out. To identify implements used during secondary cultivation.	Q/A: Definition of secondary cultivation, factors affecting number of secondary cultivations, etc. Discussion: Implements used during secondary cultivation.	School farm, Chart showing harrows.	KLB Page109-110. CERT. AGRIC Page 84-85. LONGHORN Page 110.	
	2	Minimum tillage.	To define minimum tillage. To give reasons for carrying out minimum tillage. To state advantages and disadvantages of minimum tillage.	Teacher exposes the meaning of minimum tillage. Q/A and explanations: Advantages and disadvantages of minimum tillage.		KLB Page 112-113. CERT. AGRIC Page 85. LONG HORN Page103.	
	3	Tertiary operations.	To identify tertiary operations carried out in the field. To state importance of some tertiary operations. To relate required soil tilth to the type of tertiary operations carried out.	Discussion: Ridging, rolling and leveling and their importance.	Chart / photographs showing ridgers, rollers, levelers.	KLB Pages 110-111. LONG HORN Page 86.	

5	1	**WATER SUPPLY, IRRIGATION AND DRAINAGE** Uses of water in a farm.	To state uses of water in a farm.	Q/A and brief explanations. Written assignment.	Photographs of dams, boreholes, springs and gutters.	KLB Pages 117-120. CERT. AGRIC. Pages 89-92. LONGHORN Page 114.	
	2	Sources of water in a farm.	To identify sources of water in a farm.	Q/A and brief explanations. Written assignment.	otographs of dams, boreholes, springs and gutters.	KLB Pages 117-120. CERT. AGRIC. Pages 89-92. LONGHORN	
	3	**MID TERM BREAK**					
6	1	Water collection and piping,	To describe water collection, and piping.	Assignment method / group discussion.		KLB Pages 120-121. CERT. AGRIC. Page 94. LONGHORN Page 114.	
	2	Storage and treatment of water.	To describe water storage and treatment.				
	3	Irrigation.	To identify aims of irrigation. To explain choice of irrigation equipment. To state methods of irrigation.	Brief discussion.		KLB Pages 129-134.	
7	1	Methods of irrigation.	To describe methods of irrigation. To state advantages of overhead irrigation over surface irrigation. To explain economic importance of irrigation	Probing questions and discussion.	Illustrative charts- Methods of irrigation.		
	2	Drainage.	To describe methods of water drainage.	Probing questions and discussion.	Illustrative charts- Methods of drainage.	KLB Page 136. CERT. AGRIC Pages 108-109. LONGHORN	

	3	Water pollution.	To identify agricultural practices that can lead to water pollution. To identify practices that can reduce water pollution.	Q/A: Identifying water pollutants and methods of pollution control.	Samples of water pollutants & polluted water.	KLB Page 139. CERT. AGRIC Page 110. LONGHORN Page 137	
	1	**SOIL FERTILITY** Characteristics of a fertile soil.	To identify characteristics of a fertile soil. To describe ways in which soil fertility is lost. To state ways of improving soil fertility.	Q/A and explanations. Brief discussion.	Samples of fertile soil, eroded soil,	KLB Page 142. CERT.AGRIC Page112. LONGHORN Page 140.	
8	2-3	Organic manures.	To identify role of organic manure in crop production. To state types of organic manures.	Q/A and explanations.		KLB Pages146-147. LONGHORN Pgs 143-145.	
9 & 10		**END TERM 2 EXAMS & CLOSING OF SCHOOLS**					

SCHEME OF WORK FORM ONE AGRICULTURE TERM THREE 2022

WK NO	**L/ NO**	**TOPIC/ SUBTOPIC**	**LESSON / SPECIFIC OBJECTIVES**	**TEACHING / LEARNING ACTIVITIES**	MATERIALS / RESOURCES	***REF.***	**REM.**
1	1	Methods of making organic manure.	To describe methods of making organic manure.	Discussion: Compost manure, green manure, FYM. Procedure of making manure.	Compost manure, green manure, FYM.	KLB Pages 149-150. CERT.AGRIC Page 114-116.	
	2	Quality of FYM.	To state factors influencing quality of FYM.	Detailed discussion. Q/A: Proper storage of FYM.	FYM.	KLB Page 149. CERT.AGRIC Page116.	
	3	**LIVESTOCK PRODUCTION I** Importance of livestock. Livestock types and breeds.	To state the importance of livestock. To define the terms livestock breed and livestock type.	Q/A Exposition: Definition of livestock breeds and types.	Livestock products and by-products.	KLB Page 155. CERT.AGRIC Page 118.	
2	1	Dairy cattle.	To identify key parts of a cow. To identify characteristics of dairy cattle. To describe various breeds of dairy cattle.	Drawing and labeling a cow. Q/A: Characteristics of dairy cattle.	Chart- key parts of a cow.	KLB Page 159 CERT.AGRIC Page120.	

	2	Breeds of dairy cattle.	To describe common breeds of dairy cattle.	Brief discussion: characteristics, origin of - Jersey, Guernsey, Friesian, Ayrshire, Brown Swiss, e.t.c.	Wall chart: breeds of dairy cows.	KLB Pages 159-162. CERT.AGRIC Pages 120-122.	
	3	Beef cattle.	To identify major parts of a beef animal. To identify general characteristics of beef cattle.	Drawing and labeling a beef cow.	Charts- a beef animal.	KLB Pages 162-163.	
3	1	Breeds of beef cattle.	To describe various breeds of beef cattle	Brief discussion: Hereford, Aberdeen Angus, Charolais, and Galloway.	Wall chart- Beef cattle	KLB Pages 163-164.	
	2	Dual-purpose cattle.	To identify dual-purpose cattle breeds (both exotic and indigenous). To state characteristics of dual-purpose cattle breeds.	Discuss characteristics of Sahiwal, Red Poll and Zebu (East African Zebu).	Photographs of dual-purpose cattle breeds.	KLB Pages164-165. CERT.AGRIC Pages 127-128.	
	3	Sheep. Breeds of wool sheep.	To name the key parts of a sheep. To name breeds of wool sheep. To state characteristics of each bread of wool sheep.	Identifying and stating characteristics of Merino sheep, Rambouillet, Suffolk.	Chart- key parts of a sheep. Wall chart- Breeds of wool sheep.	KLB Page 174 CERT.AGRIC Page 129-133. LONGHORN Page164.	
4	1	Mutton sheep breeds.	To name breeds of mutton sheep. To state characteristics of each bread of mutton sheep.	Identifying and stating characteristics of the Dorper, Black head Persian sheep, Masai sheep, Somali sheep.	Wall chart- Breeds of mutton sheep.	KLB Pages 176-177. CERT.AGRIC Page 132.	
	2-3	Dual-purpose sheep.	To name breeds of dual-purpose sheep. To state characteristics of each bread of dual-purpose sheep.	Assignment method: Stating characteristics of Romney Marsh, Corriedale, and Hampshire Down.	Wall chart: dual-purpose sheep breeds.	KLB Page 178. CERT.AGRIC Pages133-134	

5	1	Breeds of meat & milk goats.	To name and state characteristics of breeds of meat goats. To name and state characteristics of breeds of milk goats. To state characteristics of Angora goat.	Highlight the characteristics of: Galla goat, Boar Highlight the characteristics of: Toggenburg goat, Saanen, Jamnapuri goat.		*Klb pg 179-180*	
	2	Pig breeds.	To name key parts of a pig. To identify breeds of pigs and their characteristics.	Highlight briefly the characteristics of Large White, Ladrace, Hampshire and others.	Chart- Key parts of a pig Wall chart- Major pig breeds.	KLB Pages 166-171. CERT. AGRIC Pages 139-140.	
	3	Breeds of rabbits.	To name key parts of a rabbit. To identify breeds of rabbits and their characteristics.	Briefly discuss the typical conformation and characteristics of New Zealand White, the California White, the Chinchilla and Earlops.	Chart- Key parts of a rabbit Wall chart- Rabbit breeds.	KLB Pages 184-185. CERT. AGRIC. Pages 141-143. LONGHORN Page 183.	
6	1	Chicken breeds.	To name key parts of a chicken. To list characteristics of pure breeds of chicken	Drawing and labelling. Assignment method: Leghorn, Rhode Island Red, Australop, Light Sussex, Plymouth Rock, e.t.c.	Chart – Key parts of a chicken.	KLB Pages 172-174. CERT. AGRIC. Pages 143-146.	
	2	Camel breeds.	To identify the two major camel breeds.	Exposition; Discussion; Excursion.	Photographs of camel breeds.	KLB Pages 185-186. CERT. AGRIC. Pages 185-186.	
	3	**AGRICULTURAL**	To define the terms Economics and Agricultural Economics.	Probing questions and discussion.		KLB	

		ECONOMICS 1 economic principles. Introduction. Basic	To explain basic concepts of economics.	Discussion at length on the following: scarcity and choice, opportunity cost, preference and choice.		Pages 189-190. CERT. AGRIC Page 150. LONGHORN Page 190.	
7	1	Importance of Farm records. Types of farm records. Inventory and financial records. Labour records and	To describe the importance of keeping accurate up-to-date farm records. To describe inventory records and financial records. To describe labour records and production records, and their components.	Q/A and explanation of importance of farm records. Probing questions and discussion.	Specimen farm records.	KLB Pages 190-192	
	2	Livestock Production Records. Breeding records.	To identify components of animal breeding records. To explain importance of feeding records. To represent feeding details in tabular form. To identify details of animal health records. To state importance of keeping accurate livestock production records. To identify necessary details of livestock production records.	Q/A: Components of breeding records. Group work: - Components of breeding records of a cow in tabular form. -Components of breeding records of a sow.	Livestock breeding records.	KLB Page 194. CERT.AGRIC Page 154. LONGHORN Page 200.	
	3	Feeding records. Health records. Livestock production records.	To explain importance of feeding records. To represent feeding details in tabular form. To identify details of animal health records. To state importance of keeping accurate livestock production records. To identify necessary details of livestock production records.	Probing questions and discussion Discussion: Milk production record/ egg production record. Practical activity- Design milk production / egg production records.	Chart – Sample of animal health record.	KLB Page 196-197. CERT. AGRIC. Page 158-159.	
8-9		**SUMMATIVE ASSESSMENT TEST**					