

MINISTRY OF GENERAL EDUCATION
PROVINCIAL SCHEMES OF WORK FOR SCIENCE 5124

Subject: AGRIC SCIENCE **Grade:** 8 **Term:** ONE **Year:** 20.... **Teacher:** -----
periods per week: 12

WEEK	TOPIC	SUBTOPIC	EXPECTED OUTCOME	METHOD	SUGGESTED EXPERIMENT	REFERENCE
1	Agriculture in Zambia	Agriculture practice and industry	Explain the importance of Agriculture in Zambia state the importance of sufficient food production in Zambia Identify on a map of Zambia areas that may not be very suitable for growing maize	Demonstration Discussion Field trip Question and answers Expository Explanation Project		Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers
2		Factors that influence Agricultural Development	Identify factors that influence the development of Agriculture. Explain how the factors affect agriculture development Explain the need for farmers to diversify the production of crops and livestock	Demonstration Discussion Field trip Question and answers Expository Explanation Project		Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers
3		Farmer Support	Investigate agencies and organisations that assist farmers in input procurement, marketing and agriculture extension	Demonstration Discussion Field trip Question and answers	Field trip visiting agricultural extension officer	Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers

		Types of farmers	Explain the differences between small scale and Commercial farmers. Identifying the main Commercial farming areas in zambia.	Expository Explanation Project		
4	Soil Science	Soil formation Composition of soil Soil profile	Explain the meaning of the term soil. Describe factors that are involved in soil formation Demonstrate the composition of soil. Explain the importance of soil components. Identify different layers of a soil profile. Explain differences in soil profiles. Explain the importance of top and sub-soils	Demonstration Discussion Field trip Question and answers Expository Explanation Project	Experiment of soil components and soil profile	Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers
5		Soil profile	Relate choice of crop to be grown on depth of layers of soil. 8.2.3.5 Relate the importance of the layers of soil to	Demonstration Discussion Field trip Question and answers Expository		Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers

		<p>Soil texture.</p> <p>Types of soil.</p> <p>Organic(manures) and chemical (artificial) fertilisers</p>	<p>agricultural value of soil.</p> <p>Explain the meaning of soil texture1 Identify different types of soil.</p> <p>Demonstrate the variation of water retention in different types of soil.</p> <p>Explain the difference between manure and chemical fertilisers. Distinguish between straight and compound fertilisers.</p>	<p>y</p> <p>Explainati on Project</p>	<p>Experiment on soil texture.</p>	
6		<p>Organic(manures) and chemical (artificial) fertilisers</p>	<p>Identify fertilisers according to periods of their application.</p> <p>Interpret the composition of fertilisers using the information on their containers.</p> <p>Determine quantities of fertiliser required by a crop given various ratios for various crops.</p> <p>Explain the advantages and disadvantages of manure and chemical fertilisers</p>	<p>Demonstration</p> <p>Discussion</p> <p>Field trip</p> <p>Question and answers</p> <p>Expositor y</p> <p>Explainati on Project</p>	<p>Observing and identifying samples of fertilisers</p>	<p>Agric by G H Owen</p> <p>w.A Sakira j.parsons</p> <p>A.N king</p> <p>M.K publishers</p>
7	Crop	Classes	Identify vegetables	Demonstr	Project on	Agric by G H

	production	and varieties of vegetables Site for Vegetable growing	according to groups. Name the varieties of each vegetable. List factors that make a site suitable for vegetable growing. Explain the importance of factors that make a site suitable for vegetable growing.	ation Discussion Field trip Question and answers Expository Explanation Project	vegetable production Land preparation	Owen w.A Sakira j.parsons A.N king M.K publishers
8		Vegetable garden Seedbed preparation	Draw a simple plan for vegetable growing. Explain the importance of vegetable rotation. State the importance of a legume in vegetable rotation Demonstrate how to Prepare plots and seedbed for vegetable growing. Calculate and apply recommended quantities of manure	Demonstration Discussion Field trip Question and answers Expository Explanation Project	Land preparation	Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers
9		Planting Vegetables Weed Control	Demonstrate how to Sow seeds correctly. Demonstrate how to transplant seedlings correctly. Explain the importance of weed control in vegetables.	Demonstration Discussion Field trip Question and answers Expository Explanation	Sowing seeds Trans - planting	Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers

			<p>Describe the various methods of weed control in vegetables. Demonstrate effective weed control methods for a studied vegetable. Observe the safety rules when applying chemicals in a garden. Explain the effects of herbicides on the environment</p>	Project		
10		Pest Control	<p>Describe a pest. Identify pests in relation to crops they attack. Explain ways in which pests cause harm to crops. Demonstrate correct methods of controlling named pests in crops grown. Describe natural pest control methods. Demonstrate how to mix and apply pesticides correctly. Explain safety rules when storing pesticides. Explain the effects of prolonged use and excess pesticides on the environment.</p>	<p>Demonstration Discussion Field trip Question and answers Expository Explanation Project</p>		<p>Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers</p>

		Disease Control	Identify the symptoms of diseases on crops Identify the crops attacked by diseases. Explain methods of preventing disease attack on the crops.			
11		Harvesting and marketing	Identify the signs of readiness for harvesting the crop Demonstrate how to harvest and prepare vegetables for marketing. Describe how to price each Vegetable grown. Calculate the profit or Loss Describe how to Store vegetables correctly	Demonstration Discussion Field trip Question and answers Expository Explanation Project		Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers
12	Forestry	Importance of trees in soil management	Explain the role of trees in soil erosion and infiltration of water. State the role of trees in soil fertility	Demonstration Discussion Field trip Question and		Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers

			improvement. Identify trees used to make handles and poles. Explain how you can ensure continued supply of poles and handles from the trees.	answers Expositor y Explainati on Project		
13	End of term test	End of term test	End of term test			

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Subject: AGRIC SCIENCE **Grade:** 8 **Term:** TWO **Year:** 20.... **Teacher:** -----
periods per week: 12

WEEK	TOPIC	SUBTOPIC	EXPECTED OTCOME	METHOD	SUGGESTED EXPERIMENT	REFERENCE
1	Conservati on farming	Mixed cropping Mixed cropping	Describe conservation Farming Describe mixed cropping. Explain the role of mixed cropping on soil fertility Describe intercropping.	Demonstration Discussion Field trip Question and answers Expository Explanation Project	Project on mixed cropping and conservation	Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers
2		Land clearing and preparation	Describe mixed farming. State the role of mixed farming in soil fertility Describe the use of a suitable hoe in clearing the land for conservation farming. Demonstrate how to make ridges in conservation farming using a hoe	Demonstration Discussion Field trip Question and answers Expository Explanation Project	Making ridges in conservation farming	Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers
3		Chemical fertiliser and	Apply chemical fertiliser	Demonstration Discussion Field trip Question and	Research project on weed control	Agric by G H Owen w.A Sakira j.parsons

		manure application Planting and weed control	and manure correctly under conservation farming Plant correctly using a suitable tool. Control weeds appropriately in a crop grown under conservation farming	answers Expository Explanation Project		A.N king M.K publishers
4		Soil Erosion Control	State how to control soil erosion using vetiver hedges Plant vetiver hedges correctly	Demonstration Discussion Field trip Question and answers Expository Explanation Project	Demonstration on how soil erosion occurs.	Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers
5	Livestock production.	Importance of livestock Parts of Digestive systems	Describe the importance of livestock in Zambia. Identify parts of the digestive system of a bird and a pig. Describe the functions of the parts of the digestive systems of the animals studied Compare the digestive system of a bird and that of a pig.	Demonstration Discussion Field trip Question and answers Expository Explanation Project	Identifying the digestive system of a ruminant and non-ruminant animals	Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers

6		Parts of the reproductive systems	Identify and label the parts of the reproductive system of a female bird. Explain the importance of the reproductive system of a female bird Explain the functions of the parts of the female reproductive parts of a female bird	Demonstration Discussion Field trip Question and answers Expository Explanation Project		Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers
7		Breeds	List the various breeds of poultry studied Name some of hybrid poultry hatcheries in Zambia	Demonstration Discussion Field trip Question and answers Expository Explanation Project	Field trips to poultry farms	Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers
8		Brooder house	List the characteristics of a good poultry house State the floor space to house Poultry of different ages	Demonstration Discussion Field trip Question and answers Expository Explanation Project		Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers
9			List the equipment that must be in a poultry house. Plan a simple poultry house	Demonstration Discussion Field trip Question and answers Expository Explanation	Identifying poultry equipments	Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers

				Project		
10		Incubation of eggs and Brooding	Brood day old chicks. State the principles of Incubation. Recall the right temperature for chicks in a brooder house.	Demonstration Discussion Field trip Question and answers Expository Explanation Project	Project (observing incubation period)	Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers
11		Pests and diseases	Identify pests of poultry Studied Explain ways pests cause harm to poultry	Demonstration Discussion Field trip Question and answers Expository Explanation Project	Project on pest and disease identification	Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers
12			Prescribe correct methods of controlling pests in poultry studied. Identify diseases of poultry studied Prescribe correct methods of controlling diseases in poultry studied	Demonstration Discussion Field trip Question and answers Expository Explanation Project		Agric by G H Owen w.A Sakira j.parsons A.N king M.K publishers
13	End of term test	End of term test	End of term test	End of term test	End of term test	

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WEEK	TOPIC	SUBTOPIC	EXPECTED OUTCOME	METHOD	SUGGESTED EXPERIMENT	REFERENCE
1	livestock	Records and Marketing	Maintain proper poultry records. Collect, store and market eggs correctly Prepare birds for marketing	Demonstration Discussion Field trip Question and answers Expository Explanation Project	Project on poultry records	Agric by G H Owen W.A Sakira J. parsons A.N king M.K publishers
2	Farm structures	Storage of vegetables	Describe an appropriate storage facility for vegetables. Demonstrate how to prepare vegetables for storage	Demonstration Discussion Field trip Question and answers Expository Explanation Project	Demonstrations on how to prepare vegetables for storage	Agric by G H Owen W.A Sakira J. parsons A.N king M.K publishers
3		Poultry houses	Describe appropriate houses for day old chicks, grower, finisher, point of lay and layer. 8.7.3.2 Plan an appropriate house for a given group of birds	Demonstration Discussion Field trip Question and answers Expository Explanation Project	Field trip to see poultry houses	Agric by G H Owen W.A Sakira J. parsons A.N king M.K publishers
4		3Poultry houses	3 Construct a model of an appropriate house for a given group of poultry.	Demonstration Discussion Field trip Question and answers Expository		Agric by G H Owen W.A Sakira J. parsons A.N king M.K

				Explanation Project		publishers
5	Farm Machinery	Hand tools	Identify some hand tools used at the farm Demonstrate the proper use of hand tools. Demonstrate the proper care for hand tools	Demonstration Discussion Field trip Question and answers Expository Explanation Project	Identification of hand tools	Agric by G H Owen W.A Sakira J. parsons A.N king M.K publishers
6		Sprayer Animal drawn implements	Identify major parts of a hand sprayer Identify animal drawn implements Identify major parts of animal drawn implements	Demonstration Discussion Field trip Question and answers Expository Explanation Project	Identifying parts of the sprayer	Agric by G H Owen W.A Sakira J. parsons A.N king M.K publishers
7		Storage for farm machinery	Explain the functions of major parts of animal ± drawn implements Prepare hand tools for Storage Choose an appropriate facility for storing hand tools. Describe an appropriate facility for storing animal drawn	Demonstration Discussion Field trip Question and answers Expository Explanation Project		Agric by G H Owen W.A Sakira J. parsons A.N king M.K publishers

			implements. Prepare animal drawn implements for storage			
8			Demonstrate the proper care for animal drawn implements	Demonstration Discussion Field trip Question and answers Expository Explanation Project		Agric by G H Owen W.A Sakira J. parsons A.N king M.K publishers
9	Farm Management	Farm Management Agricultural economics	Describe farm management Describe agricultural Economics	Demonstration Discussion Field trip Question and answers Expository Explanation Project		Agric by G H Owen W.A Sakira J. parsons A.N king M.K publishers
10		Opportunity cost and production decision Types of credit	Describe the term opportunistic cost. Explain the term production decision in Agriculture Describe the types of credit available in Agriculture.	Demonstration Discussion Field trip Question and answers Expository Explanation Project		Agric by G H Owen W.A Sakira J. parsons A.N king M.K publishers
11		Interest	Explain the term interest Explain the difference between simple and compound interests Explain the importance of	Demonstration Discussion Field trip Question and answers Expository Explanation Project		Agric by G H Owen W.A Sakira J. parsons A.N king M.K publishers

		Records	various financial documents. Prepare production records			
12		Records Enterprise Grading and Standardisation	Prepare financial records Describe the term enterprise. Explain gross output and gross margins of an enterprise Explain the term grading. Explain the term standardisation Grade produce from an enterprise.	Demonstration Discussion Field trip Question and answers Expository Explanation Project	Project on how to keep farm financial records	Agric by G H Owen W.A Sakira J. parsons A.N king M.K publishers
13	End of term test	End of term test	End of term test	End of term test		