

RATIONALISED SCHEMES OF WORK



AGRICULTURE AND NUTRITION

GRADE 9

TERM 3

TEACHER'S NAME.....

TSC NUMBER.....

SCHOOL.....

WK	LSN	STRAND	SUB-STRAND	LESSON LEARNING OUTCOMES	LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS	LEARNING RESOURCES	ASSESSMENT METHODS	REFL
1	1	Hygiene Practices	Cleaning Waste Disposal Facilities - Importance of cleaning waste disposal facilities Cleaning Waste Disposal Facilities - Waste bins, sinks, and open drains	By the end of the lesson, the learner should be able to: -Explain the importance of cleaning waste disposal facilities. -Identify different waste disposal facilities. -Value cleanliness of waste disposal facilities.	In groups, learners are guided to: -Study pictures of different waste disposal facilities. -Identify the facilities shown in the pictures. -Discuss ways in which each facility should be cleaned. -Share ideas with other groups.	How does cleaning waste disposal facilities promote hygiene?	MENTOR Agriculture Learner's Book p. 52 -Digital devices -Pictures of waste disposal facilities -Resource person MENTOR Agriculture Learner's Book p. 53 -Print resources	Assessment rubrics - Written questions - Oral questions - Observation	
	2	Hygiene Practices	Cleaning Waste Disposal Facilities - Importance of cleaning waste bins	By the end of the lesson, the learner should be able to: -Explain the importance of cleaning waste bins. -Describe qualities of a good waste bin. -Value cleaning of waste bins.	In groups, learners are guided to: -Discuss the importance of cleaning waste bins. -Describe qualities of a good waste bin. -Share findings with classmates.	Why is it important to clean waste bins?	MENTOR Agriculture Learner's Book p. 53-54 -Digital devices -Resource person	Assessment rubrics - Written questions - Oral questions - Observation	
	3	Hygiene Practices	Cleaning Waste Disposal Facilities - Importance of cleaning sinks Cleaning Waste Disposal Facilities - Importance of cleaning open drains	By the end of the lesson, the learner should be able to: -Explain the importance of cleaning sinks. -Describe types of sinks. -Value cleaning of sinks.	In groups, learners are guided to: -Discuss the importance of cleaning sinks. -Describe different types of sinks. -Share findings with classmates.	Why is it important to clean sinks?	MENTOR Agriculture Learner's Book p. 54 -Digital devices -Resource person MENTOR Agriculture Learner's Book p. 54-55	Assessment rubrics - Written questions - Oral questions - Observation	
	4	Hygiene Practices	Cleaning Waste Disposal Facilities - Cleaning a galvanized iron waste bin	By the end of the lesson, the learner should be able to: -Outline materials needed for cleaning a galvanized iron waste bin.	In groups, learners are guided to: -Identify materials needed for cleaning a galvanized iron waste bin. -Clean a galvanized iron waste bin following these	How do we clean a galvanized iron waste bin?	MENTOR Agriculture Learner's Book p. 56 -Warm soapy water -Soft brush -Cold water -Disinfectant -Soft cloth	Assessment rubrics - Activity journal - Observation - Practical assessment	

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				-Clean a galvanized iron waste bin. -Appreciate a clean waste bin.	steps: -a) Tie the liner at the top and empty the bin. -b) Check for maggots or molds. -c) Scrub with a brush dipped in warm soapy water. -d) Dry with a soft cloth immediately.		-Galvanized iron waste bin		
2	1	Hygiene Practices	Cleaning Waste Disposal Facilities - Cleaning a stainless steel sink Cleaning Waste Disposal Facilities - Cleaning a ceramic sink	By the end of the lesson, the learner should be able to: -Outline materials needed for cleaning a stainless steel sink. -Clean a stainless steel sink. -Appreciate a clean sink.	In groups, learners are guided to: -Identify materials needed for cleaning a stainless steel sink. -Clean a stainless steel sink following these steps: -a) Clean with warm soapy water. -b) Rinse with clean water. -c) Pour a mixture of vinegar and baking soda down the sink occasionally. -d) Flash with hot water and dry the sink.	How do we clean a stainless steel sink?	MENTOR Agriculture Learner's Book p. 57 -Warm soapy water -Soft cloth -Vinegar -Baking soda -Stainless steel sink MENTOR Agriculture Learner's Book p. 58 -Soap -Nylon sponge or soft rag -Warm water -Disinfectant -Ceramic sink	Assessment rubrics - Activity journal - Observation - Practical assessment	
	2	Hygiene Practices	Cleaning Waste Disposal Facilities - Cleaning an open drain	By the end of the lesson, the learner should be able to: -Outline materials needed for cleaning an open drain. -Clean an open drain. -Appreciate a clean open drain.	In groups, learners are guided to: -Identify materials needed for cleaning an open drain. -Clean an open drain following these steps: -a) Pick any litter or leaves. -b) Scrub with warm soapy water or sweep it. -c) Rinse with clean water with disinfectant. -d) Occasionally use baking soda when cleaning.	How do we clean an open drain?	MENTOR Agriculture Learner's Book p. 59 -Warm soapy water -Broom -Disinfectant -Baking soda	Assessment rubrics - Activity journal - Observation - Practical assessment	

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3	3	Hygiene Practices	Disinfecting Clothing and Household Articles - Meaning of laundering and disinfecting Disinfecting Clothing and Household Articles - Methods of disinfecting clothing and household articles	By the end of the lesson, the learner should be able to: -Define the terms laundering and disinfecting. -Explain the difference between laundering and disinfecting. -Appreciate the importance of laundering and disinfecting.	In pairs, learners are guided to: -Use digital or print resources to find out the meaning of laundering and disinfecting. -Discuss how the processes are carried out in their homes. -Write down discussion points and share with classmates.	What is the difference between laundering and disinfecting?	MENTOR Agriculture Learner's Book p. 62 -Digital devices -Print resources -Resource person MENTOR Agriculture Learner's Book p. 63	Assessment rubrics - Written questions - Oral questions - Observation	
	4	Hygiene Practices	Disinfecting Clothing and Household Articles - Using sunlight for disinfection Disinfecting Clothing and Household Articles - Using salt for disinfection	By the end of the lesson, the learner should be able to: -Explain how sunlight is used for disinfection. -Identify clothing and household articles suitable for sun disinfection. -Value disinfection using sunlight.	In groups, learners are guided to: -Explain how sunlight is used for disinfection. -Identify clothing and household articles suitable for sun disinfection. -Discuss advantages and disadvantages of using sunlight for disinfection. -Share findings with classmates.	How is sunlight used for disinfection of clothing and household articles?	MENTOR Agriculture Learner's Book p. 64 -Digital devices -Resource person	Assessment rubrics - Written questions - Oral questions - Observation	
	1	Hygiene Practices	Disinfecting Clothing and Household Articles - Using boiling for disinfection	By the end of the lesson, the learner should be able to: -Explain how boiling is used for disinfection. -Identify clothing and household articles suitable for boiling disinfection.	In groups, learners are guided to: -Explain how boiling is used for disinfection. -Identify clothing and household articles suitable for boiling disinfection. -Discuss advantages and disadvantages of using boiling for disinfection.	How is boiling used for disinfection of clothing and household articles?	MENTOR Agriculture Learner's Book p. 65 -Digital devices -Resource person	Assessment rubrics - Written questions - Oral questions - Observation	

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				-Value disinfection using boiling.	-Share findings with classmates.				
	2	Hygiene Practices	Disinfecting Clothing and Household Articles - Using disinfectants Disinfecting Clothing and Household Articles - Using ironing for disinfection	By the end of the lesson, the learner should be able to: -Explain how disinfectants are used for disinfection. -Identify clothing and household articles suitable for disinfectant use. -Value disinfection using disinfectants.	In groups, learners are guided to: -Explain how disinfectants are used for disinfection. -Identify different types of disinfectants (white vinegar, borax, hydrogen peroxide, pine oil, sodium hypochlorite). -Identify clothing and household articles suitable for disinfectant use. -Share findings with classmates.	How are disinfectants used for disinfection of clothing and household articles?	MENTOR Agriculture Learner's Book p. 65 -Digital devices -Resource person	Assessment rubrics - Written questions - Oral questions - Observation	
	3	Hygiene Practices	Disinfecting Clothing and Household Articles - Safety precautions during disinfection	By the end of the lesson, the learner should be able to: -Identify safety precautions during disinfection. -Explain the importance of safety precautions. -Value safety during disinfection.	In groups, learners are guided to: -Brainstorm safety precautions that one should consider when using different disinfection methods. -Explain the importance of each safety precaution. -Share findings with classmates.	What safety precautions should be observed during disinfection?	MENTOR Agriculture Learner's Book p. 66 -Digital devices -Resource person	Assessment rubrics - Written questions - Oral questions - Observation	
	4	Hygiene Practices	Disinfecting Clothing and Household Articles - Disinfecting aprons using sunlight Disinfecting Clothing and Household Articles -	By the end of the lesson, the learner should be able to: -Outline steps for disinfecting aprons using sunlight. -Disinfect aprons using sunlight. -Appreciate sunlight as a disinfection method.	In groups, learners are guided to: -Outline steps for disinfecting aprons using sunlight. -Disinfect aprons following these steps: -a) Sort the aprons. -b) Wash using correct method and detergents. -c) Rinse in warm then cold	How do we disinfect aprons using sunlight?	MENTOR Agriculture Learner's Book p. 67 -Warm water -Soap -Clothes line -Aprons -Commercial disinfectant -Gloves	Assessment rubrics - Activity journal - Observation - Practical assessment	

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			Disinfecting gloves using commercial disinfectants		water. -d) Dry in direct sunlight until totally dry.				
4	1	Hygiene Practices	Disinfecting Clothing and Household Articles - Disinfecting white cotton towel using boiling	By the end of the lesson, the learner should be able to: -Outline steps for disinfecting a white cotton towel using boiling. -Disinfect a white cotton towel using boiling. -Appreciate boiling as a disinfection method.	In groups, learners are guided to: -Outline steps for disinfecting a white cotton towel using boiling. -Disinfect a white cotton towel following these steps: -a) Wear protective clothing. -b) Wash the towel in warm soapy water. -c) Heat water until it boils. -d) Put towel in boiling water for 2-5 minutes. -e) Allow water to cool with towel inside. -f) Remove towel and rinse in warm then cold water. -g) Hang to dry in direct sunlight.	How do we disinfect a white cotton towel using boiling?	MENTOR Agriculture Learner's Book p. 68 -White cotton towel -Warm soapy water -Clean water -Plastic buckets with lids -Wooden stick -Jiko or stove -Sufuria -Pot holder -Protective clothing	Assessment rubrics - Activity journal - Observation - Practical assessment	
	2	Hygiene Practices	Disinfecting Clothing and Household Articles - Disinfecting a dustcoat by ironing Disinfecting Clothing and Household Articles - Disinfecting handkerchiefs using salt	By the end of the lesson, the learner should be able to: -Outline steps for disinfecting a dustcoat by ironing. -Disinfect a dustcoat by ironing. -Appreciate ironing as a disinfection method.	In groups, learners are guided to: -Outline steps for disinfecting a dustcoat by ironing. -Disinfect a dustcoat following these steps: -a) Sort dustcoats according to fiber. -b) Wash using correct laundry method. -c) Rinse and dry appropriately, but leave slightly damp.	How do we disinfect a dustcoat by ironing?	MENTOR Agriculture Learner's Book p. 69 -Warm water -Soap -Basin -Iron box -Ironing board -Dustcoat MENTOR Agriculture Learner's Book p. 70 -Salt -Cold water -Handkerchiefs	Assessment rubrics - Activity journal - Observation - Practical assessment	

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					-d) Set iron box to correct temperature. -e) Iron with high heat to complete dryness.				
	3	Hygiene Practices	Disinfecting Clothing and Household Articles - Disinfecting socks using commercial disinfectant	By the end of the lesson, the learner should be able to: -Outline steps for disinfecting socks using commercial disinfectant. -Disinfect socks following these steps: -a) Sort the socks. -b) Wash using correct laundry method. -c) Rinse in warm water. -d) Prepare disinfectant as per instructions. -e) Soak socks in solution for 5-10 minutes. -f) Rinse and dry appropriately.	In groups, learners are guided to: -Outline steps for disinfecting socks using commercial disinfectant. -Disinfect socks following these steps: -a) Sort the socks. -b) Wash using correct laundry method. -c) Rinse in warm water. -d) Prepare disinfectant as per instructions. -e) Soak socks in solution for 5-10 minutes. -f) Rinse and dry appropriately.	How do we disinfect socks using commercial disinfectant?	MENTOR Agriculture Learner's Book p. 71 -Water -Soap -Disinfectant -Basin -Socks	Assessment rubrics - Activity journal - Observation - Practical assessment	
	4	Hygiene Practices Production Techniques	Disinfecting Clothing and Household Articles - Importance of disinfecting clothing and household articles Grafting in Plants - Meaning and methods of grafting	By the end of the lesson, the learner should be able to: -Explain the importance of disinfecting clothing and household articles. -Appreciate the importance of disinfecting for hygiene purposes. -Value disinfection as a hygiene practice.	In groups, learners are guided to: -Use digital or printed resources to search for the importance of disinfecting clothing and household articles for hygiene purposes. -Make presentations to classmates on the findings.	Why is it important to disinfect clothing and household articles?	MENTOR Agriculture Learner's Book p. 71 -Digital devices -Print resources -Resource person MENTOR Agriculture Learner's Book p. 74	Assessment rubrics - Written questions - Oral questions - Presentations	
5	1	Production Techniques	Grafting in Plants - Observing the grafting process	By the end of the lesson, the learner should be able to:	In groups, learners are guided to: -Study pictures showing the grafting process.	What happens during the grafting process?	MENTOR Agriculture Learner's Book p. 75 -Pictures of grafting	Assessment rubrics - Written questions -	

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				-Describe the grafting process from pictures. -Identify materials used in grafting. -Value grafting as a propagation method.	-Describe what is happening in the pictures. -Identify materials used in grafting. -Share findings in class.		process -Digital devices	Oral questions - Observation	
	2	Production Techniques	Grafting in Plants - Reasons for grafting Grafting in Plants - Grafting for aesthetic purposes	By the end of the lesson, the learner should be able to: -Identify reasons for grafting plants. -Explain different purposes of grafting. -Appreciate various purposes of grafting.	In groups, learners are guided to: -Identify reasons for grafting plants (repair, aesthetic value, rejuvenation, improvement). -Explain different purposes of grafting. -Share findings in class.	What are the reasons for grafting plants?	MENTOR Agriculture Learner's Book p. 76 -Digital devices -Print resources -Resource person MENTOR Agriculture Learner's Book p. 77	Assessment rubrics - Written questions - Oral questions - Observation	
	3	Production Techniques	Grafting in Plants - Practical grafting for aesthetic purposes	By the end of the lesson, the learner should be able to: -Prepare materials for grafting for aesthetic purposes. -Carry out grafting for aesthetic purposes. -Embrace grafting for aesthetic purposes.	In groups with the help of a resource person, learners are guided to: -Prepare materials for grafting for aesthetic purposes. -Carry out grafting for aesthetic purposes following these steps: -a) Select rootstock plant. -b) Prepare the scion. -c) Prepare the rootstock. -d) Insert the scion. -e) Secure the graft. -f) Care for the grafted plant.	How do we carry out grafting for aesthetic purposes?	MENTOR Agriculture Learner's Book p. 77-78 -Ornamental plant (hibiscus or bougainvillea) -Scion of related species -Sharp knife -Grafting tape -Gloves -Resource person	Assessment rubrics - Activity journal - Observation - Practical assessment	
	4	Production Techniques	Grafting in Plants - Grafting for rejuvenation Grafting in Plants - Practical	By the end of the lesson, the learner should be able to: -Outline steps for grafting for rejuvenation.	In groups, learners are guided to: -Discuss grafting for rejuvenation. -Outline steps for grafting for rejuvenation.	How is grafting done for rejuvenation?	MENTOR Agriculture Learner's Book p. 78 -Digital devices -Print resources -Resource person MENTOR Agriculture	Assessment rubrics - Written questions - Oral	

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			grafting for rejuvenation	-Identify materials needed for grafting. -Value grafting for rejuvenation.	-Identify materials needed for grafting. -Share findings in class.		Learner's Book p. 78-79 -Old tree stump -Scions -Sharp knife -Grafting tape -Gloves -Wax	questions - Observation	
6	1	Production Techniques	Grafting in Plants - Grafting for improvement purposes	By the end of the lesson, the learner should be able to: -Outline steps for grafting for improvement purposes. -Identify materials needed for grafting. -Value grafting for improvement.	In groups, learners are guided to: -Discuss grafting for improvement purposes. -Outline steps for grafting for improvement purposes. -Identify materials needed for grafting. -Share findings in class.	How is grafting done for improvement purposes?	MENTOR Agriculture Learner's Book p. 79-80 -Digital devices -Print resources -Resource person	Assessment rubrics - Written questions - Oral questions - Observation	
	2	Production Techniques	Grafting in Plants - Practical grafting for improvement purposes Grafting in Plants - Caring for grafted plants	By the end of the lesson, the learner should be able to: -Prepare materials for grafting for improvement purposes. -Carry out grafting for improvement purposes. -Embrace grafting for improvement purposes.	In groups with the help of a resource person, learners are guided to: -Prepare materials for grafting for improvement purposes. -Carry out grafting for improvement purposes following these steps: -a) Select rootstock plant (lemon seedling). -b) Prepare scion (orange seedling). -c) Prepare rootstock. -d) Insert scion. -e) Secure graft. -f) Care for grafted plant.	How do we carry out grafting for improvement purposes?	MENTOR Agriculture Learner's Book p. 79-80 -Orange plant seedling -Lemon plant seedling -Sharp knife -Grafting tape -Wax -Gloves -Resource person MENTOR Agriculture Learner's Book p. 81 -Pictures of plant care -Digital devices	Assessment rubrics - Activity journal - Observation - Practical assessment	

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	3	Production Techniques	Grafting in Plants - Practical care for grafted plants	By the end of the lesson, the learner should be able to: -Demonstrate care for grafted plants. -Monitor grafted plants regularly. -Value proper care for grafted plants.	In groups, learners are guided to: -Demonstrate care for grafted plants following these methods: -a) Check graft union weekly. -b) Remove emerging shoots from rootstock. -c) Water plant if rainfall is insufficient. -d) Remove grafting tape once grafting is successful. -Monitor grafted plants regularly.	How do we practically care for grafted plants?	MENTOR Agriculture Learner's Book p. 81 -Grafted plants -Watering can -Pruning shears	Assessment rubrics - Activity journal - Observation - Practical assessment	
	4	Production Techniques	Grafting in Plants - Selecting plants for grafting Grafting in Plants - Record keeping for grafted plants	By the end of the lesson, the learner should be able to: -Select suitable plants for grafting. -Identify factors to consider when selecting plants. -Value proper plant selection for grafting.	In groups, learners are guided to: -Select suitable plants in the school compound for grafting. -Identify plants to provide rootstock and scion. -Discuss factors to consider when selecting plants for grafting. -Share findings in class.	What factors should be considered when selecting plants for grafting?	MENTOR Agriculture Learner's Book p. 82 -School compound with plants -Resource person -Record keeping chart -Pencil -Grafted plants	Assessment rubrics - Written questions - Oral questions - Observation	
7	1	Production Techniques	Homemade Sun Dryer - Concept and importance Homemade Sun Dryer - Materials for construction	By the end of the lesson, the learner should be able to: -Explain the concept of a homemade sun dryer. -Identify reasons for preserving vegetables. -Value homemade sun dryers for preservation.	In pairs, learners are guided to: -Brainstorm on how a homemade sun dryer for preserving vegetables can be made. -Identify reasons for preserving vegetables (reduce wastage, control spoilage, ensure availability, maintain quality).	Why do we need a homemade sun dryer for vegetables?	MENTOR Agriculture Learner's Book p. 86 -Digital devices -Resource person MENTOR Agriculture Learner's Book p. 87 -Video clip	Assessment rubrics - Written questions - Oral questions - Observation	

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					-Share points with classmates.				
	2	Production Techniques	Homemade Sun Dryer - Design and sketching	By the end of the lesson, the learner should be able to: -Draw a sketch of a homemade sun dryer. -Include measurements in the sketch. -Value proper design for functionality.	In groups, learners are guided to: -Use information from previous lessons to draw a sketch of a homemade sun dryer. -Include measurements in the sketch. -Share sketches with classmates.	How do we design a homemade sun dryer?	MENTOR Agriculture Learner's Book p. 87 -Drawing materials -Ruler -Paper	Assessment rubrics - Sketches - Observation - Peer assessment	
	3	Production Techniques	Homemade Sun Dryer - Measuring and cutting materials Homemade Sun Dryer - Making the framework	By the end of the lesson, the learner should be able to: -Measure and cut materials for a homemade sun dryer. -Use tools safely. -Value precision in measurement.	In groups, learners are guided to: -Use the sketch of a homemade sun dryer to measure and cut materials. -Measure and cut pieces of timber to the length shown in the sketch. -Observe safety when using tools.	How do we measure and cut materials for a homemade sun dryer?	MENTOR Agriculture Learner's Book p. 88 -Timber -Measuring tape -Saw -Safety gear -Cut timber pieces -Nails -Hammer -Wire mesh	Assessment rubrics - Activity journal - Observation - Practical assessment	
	4	Production Techniques	Homemade Sun Dryer - Covering the structure	By the end of the lesson, the learner should be able to: -Cover the structure with polythene paper. -Ensure proper fitting of the cover. -Value proper covering for effectiveness.	In groups, learners are guided to: -Cover the structure using polythene paper. -Cut polythene according to the size of the sides to be covered, including the door. -Ensure proper fitting of the cover.	How do we cover a homemade sun dryer?	MENTOR Agriculture Learner's Book p. 88 -Framework structure -Polythene paper -Scissors -Stapler/nails -Safety gear	Assessment rubrics - Activity journal - Observation - Practical assessment	
8	1	Production Techniques	Homemade Sun Dryer - Preparing vegetables for drying Homemade Sun	By the end of the lesson, the learner should be able to: -Prepare vegetables for	In groups, learners are guided to: -Choose fresh vegetables without physical damage. -Wash vegetables using	How do we prepare vegetables for drying?	MENTOR Agriculture Learner's Book p. 89 -Fresh vegetables -Clean water -Knife	Assessment rubrics - Activity journal - Observation -	

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