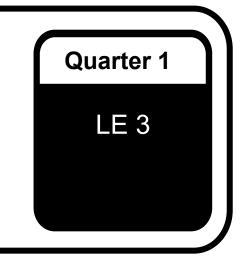
Senior High School



Lesson Exemplar in General TechPro Agri-Fishery Arts



Lesson Exemplar for TechPro-AFA_Agricultural Crops Production Senior High School Quarter 1: Unit 3

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LESSON EXAMPLE FOR STRENGTHENED SHS CURRICULUM

UNIT LESSON EXEMPLAR			
Learning Area	TECHPRO-AFA	Grade level	11
Semester	FIRST	Quarter	1

I. OBJECTIVES			
Content Standard	The learners demonstrate understanding of farm tools, implements, simple equipment and its maintenance according to work requirement.		
Performance Standard	The learners demonstrate skills in classifying farm tools, implements, equipment and its maintenance according to work requirement.		
Learning Competencies	 Key Topics Learned in the Previous Grade Level: Basic Plant Propagation Soil Preparation and Gardening Simple Crop Classification Planting Tools and Equipment Care and Maintenance of Plants Benefits of Home Gardening In this lesson, the Grade 11 learners will be able to: classify the different farm tools, implement and equipment according to work requirement. 		



	A. References]
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	Department of Education. 2020. "TLE Agricultural Crop Production: Preparing Materials, Tools, and Equipment for Horticultural Production Work."	
	Department of Education. 2020. "Agricultural Crop Production: Farm Tools & Maintenance (Grade 7/8)." StudyLib. https://studylib.net/doc/27069732/7-8tle-agricultural-crop-production-quarter-1-module-1.	
I. REFERENCES &	Department of Education. K to 12 Basic Education Curriculum Junior High School Technical Livelihood Education and Senior High School Technical-Vocational-Livelihood Track Agri – Fishery Arts – Agri – Crop Production (NC II). Accessed May 7, 2025. https://www.deped.gov.ph/wp- content/uploads/2019/01/Agricultural-Crops-Production-NC-II-CG.pdf.	
MATERIALS	How to Practically and Effectively Maintain Farm Tools and Equipment https://www.godings.com.au/5-top- tips-for-farm-machinery-maintenance/	
	Occupational Safety Measures in The Farm. 2024. Accessed May 7, 2025. https://www.slideshare.net/slideshow/occupational-safety-measures-in-the-farm-pptx/271593682	
	Technical Education and Skills Development Authority (TESDA). December 2013 Training Regulations: Agricultural Crops Production NC II.	
	B. Materials	
	Pictures, video clip, power point presentation, laptop/ tablets, smart TV, activity sheets, internet connectivity, actual tools, implements and equipment	
	B. MaterialsPictures, video clip, power point presentation, laptop/ tablets, smart TV, activity sheets, internet	



II. CONTENT	 Farm Tools, Implement and Equipment Hand Tools Digging tools Propagation tools Harvesting tools Measuring tools Farm implements and equipment Water pumps Hand tractor Plow Harrow Sprayer Maintenance of farm tools, implements and equipment Orrective Preventive Schedule
III. LESSON OBJECTIVES	 1.1. differentiate farm tools, implement and equipment according to work requirement 1.2. discuss the different functions of farm tools, implement, and equipment 1.3. discuss maintenance of farm tools, implements and equipment.



IV. PROCEDURES		Annotation
	A.1. Activating Prior Knowledge	The goal of this activity is to activate
	Directions: Before we dive into classifying farm tools, implements, and	students' prior knowledge about
	equipment, it's important to understand how each one plays a unique role in	farm tools, implements, and
	farming. Farmers rely on different items depending on the task they need to	equipment, and to help them
	complete—whether it's planting seeds, preparing the soil, or harvesting crops.	categorize and understand the
	Today, we'll explore these items more closely by sorting them into categories and	functions of these items in
	connecting them to real-life farming tasks by doing the following activities.	agricultural practices.
	1. Sorting Images	
	• Provide learners with varied pictures or realia or actual farm tools,	
	implements, and equipment (e.g., hoe, plow, sickle) and ask them	
	to sort these into three groups: tools, implements, and equipment.	
	• Then, ask them to match each item with a farming task (e.g.	
planting, harvesting, measuring).		
A. Activating Prior	2. Small Group Discussion	
Knowledge	• Divide the learners into small groups and have the learners	
	discussed their answers to the following questions:	
	✓ Have you seen these tools, implements or equipment in real life?	
	If so, where and in what context?	
	✓ Based on your observation or experience, how do you think this	
	farm tool, implement or equipment work?	
	A.2. Establishing the Purpose of the Lesson	
	Let's find out how much you know about farm tools, implements and	
equipment. Maybe, some of you are sons and daughters of farmers who have		To clearly communicate the goals of
some experiences in farming. In this lesson, you will be able to:		the lesson to the learners, the
	1.1. differentiate farm tools, implement and equipment according to work	teacher will present the lesson
requirement		objectives ensuring that learners
	1.2. discuss the different functions of farm tools, implement, and equipment	understand what they will learn
	1.3. discuss maintenance of farm tools, implements and equipment.	and why it is important. By doing



			this, it motivates learners and help
			them understand the relevance of
			the lesson and encourages active
			participation.
		B.1. Presenting Examples	The teacher will begin by explaining
		Farm Tech in Focus!	the importance of understanding
		Directions: Now, let's take a closer look at how they're used in real-life farming	farm tools, implements, and
		situations. To deepen your understanding, we're going to watch a short video that	equipment in modern agriculture
		shows these items in action. As you watch, pay close attention to the farm tools,	and highlight how the presence of
		implements or equipment being used-notice how they move, what they're	technology transforms farming
		attached to, and what tasks they're performing. After the video, we'll discuss what	practices. The activity "Farm Tech
		you have observed and connect it to what we've learned so far.	in Focus," will engage students by
		• Video Clip: Ask students to pay close attention to the video clip and be	connecting the lesson content to
		ready to answer questions afterwards. This will help learners connect the	real-life examples and personal
		visual examples to the lesson content and encourage active participation.	experiences, while also
		After the video, ask learners to identify any tools, implements, or	encouraging critical thinking and
		equipment they recognize and share they have with these items.	active participation.
	B. Instituting New	Think-Pair Share	
	Knowledge	Directions: Let's take a moment to reflect on what we've seen and learned.	
	intowicage	To help us think more deeply and share ideas, we'll do a Think-Pair-Share	
		activity. First, think quietly about the questions I'll ask. Then, pair up with	
		a classmate to discuss your thoughts. Finally, we'll share some of your	
		insights with the whole group. This will help us understand how farm	
		equipment works and why it's important in real-life farming.	
		Process Questions:	
	1. Have you ever seen or used a tractor? What was it like? Ask		
	volunteer-learners to draw the items they have identified.		
	2. Did you notice the implement attached to the tractor? What was it used for?		
		3. What might happen if a piece of equipment like a tractor isn't	
		properly maintained?	



B.2. Discussing New Concept

Farm tools, implements, and equipment are essential components in *T* agricultural crop production, significantly enhancing the efficiency and speed of agricultural tasks. Their availability allows farmers to perform various operations *t t* more easily and quickly. Without the proper knowledge and skills to use them *ir* effectively, these resources become practically useless.

To achieve successful farm operations, it is crucial for individuals to have a thorough understanding of the tools, implements, and equipment they are using. This includes knowing how to operate them correctly, understanding their specific functions, and being aware of the best practices for their maintenance. Mastery of these aspects ensures that the tools and equipment are utilized to their full potential, leading to improved productivity and efficiency in crop production.

To engage students actively in the learning process by combining traditional lecture methods with interactive discussion techniques. this approach aims to enhance understanding, retention, and application of the lesson content thereby enhancing understanding among learners and makes the lesson engaging more and enjoyable.

A. Differentiating Farm Tools, Implements, and Equipment

Definition and Examples:

- Farm Tools: Hand-held tools like hoes, rakes, and spades.
- Implements: Attachments for tractors like plows, harrows, and seed drills.
- Equipment: Larger machinery like tractors, combine harvesters, and irrigation systems.

Activity 1: Group the learners and provide each group with pictures of various tools, implements, and equipment. Have them categorize each item. To deepen understanding and enhance communication skills, each group can give a short presentation explaining how they categorized the farm tools, implements, and equipment. This activity will help reinforce their grasp of the lesson content. To support their work, provide the groups with a worksheet or graphic organizer to help them organize their ideas clearly. Use the following rubric to assess their presentation and understanding.

Integrating collaborative activities encourage learners to work together, share ideas, and learn from each other. This interaction fosters a deeper understanding of the content. These activities help learners develop essential skills such as communication, teamwork, problem-solving, and leadership.



Indicators	Excellent (4)	Proficient (3)	Developing (2)
Accuracy of	All items are	Most items are	Some items
Categorization	correctly	correctly	are correctly
	categorized	categorized	categorized;
	with clear and	with mostly	explanations
	logical	clear	may lack
	explanations.	reasoning.	clarity or logic.
Connection to	Strong and	Good	Limited or
Farming Tasks	accurate	connections	vague
	connections	made, with	
	made between	minor	farming tasks.
	items and	inaccuracies or	
	specific	generalizations.	
	farming tasks.		
Use of Visual	Graphic	Organizer is	Organizer is
Aids /	organizer or	mostly	partially
Worksheet	worksheet is	complete and	1
	complete, neat,	supports the	lacks clarity.
	and enhances	presentation.	
	understanding.		
Presentation	Clear,	Clear delivery	
Skills	confident, and	with minor	delivery; only
	engaging	issues; most	
	delivery; all	group members	members
	group	participate.	participate.
	members		
	participate.		



 Digging Tools: Examples: Shovels, spades, and hoes. Functions: Used for digging, turning soil, and preparing planting beds. 	
 Propagation Tools: Examples: Seed trays, dibblers, and hand trowels. Functions: Used for planting seeds, transplanting seedlings, and propagating plants. 	
 Harvesting Tools: Examples: Sickles, pruning shears, and harvest knives. Functions: Used for cutting and gathering crops during harvest. Measuring Tools: Examples: Measuring tapes, soil thermometers, and pH meters. Functions: Used for measuring distances, soil temperature, and soil pH levels. Farm Implements and Equipment: Larger tools and machinery that enhance efficiency in tasks like irrigation, soil preparation, and crop protection. Water Pumps: Function: Used for irrigating fields by pumping water from a source to the crops. Hand Tractor: Function: A versatile piece of equipment used for plowing, tilling, and transporting materials on small farms. Plow: Function: Used for turning and breaking up soil to prepare it for planting. 	
Harrow:	



 Function: Used for breaking up a plowing, as well as for Sprayer: removing weeds. Function: Used for applying pesticide crops. Activity 2: Assign each group a specific equipment. Have them research and presen printed or digital photos, realia or actu equipment during the group presentation guide questions: What is the name of your ass equipment? What is its main function why is this item important in the How is it used properly and safely What are the basic maintenance p good condition? Group Presentation Checklist: Cla Implements, and Equipment 	es, herbicides, and fertilizers to tool, implement, or piece of at its function to the class. Use al farm tools, implement or . Then, answer the following bigned tool, implement, or etion in farming? farming process? ? practices needed to keep it in	By integrating the "Research and Reflect!" activity into your lessons, you can create a dynamic and engaging learning environment that promotes critical thinking, independent learning, and reflective practice. By doing these activities, academic learning is not only enhanced but this also helps our learners develop essential life skills.
Task	Done (√)	
Identified and named assigned tool, implement, or equipment correctly		
Classified the farm tool, implement or equipment correctly		
Described its main function in farming.		
Explained how it is used properly and safely.		
Listed basic maintenance practices for the item.		



Used visual aid (e.g., chart, photo, realia, or	
drawing).	
Organized ideas using a worksheet or graphic	
organizer.	
Presented clearly, confidently, and within the	
time limit.	
C. Maintenance of Farm Tools, Implements, and Equipment	
Types of Maintenance:	
Corrective Maintenance: Actions taken to repair or restore tools,	
implements, and equipment to their proper working condition after a	a
failure or malfunction has occurred.	
Examples:	
Repairing a broken handle on a hoe.	
Fixing a malfunctioning tractor engine.	
Replacing worn-out parts on a combine harvester.	
Importance: Ensures that equipment is quickly restored to	
working order, minimizing downtime and preventing further	
damage.	
uumugoi	
• Preventive Maintenance: Regular, scheduled maintenance tasks	s
performed to prevent potential failures and ensure that tools, implements,	
and equipment remain in good working condition.	,
Examples:	
Regularly oiling and lubricating moving parts.	
Sharpening blades and cutting edges.	
Checking and tightening bolts and screws.	
Importance: Helps to extend the lifespan of equipment, reduce the	
likelihood of unexpected breakdowns, and maintain optimal	



BUREAU OF LEARNING DELIVERY	
performance.	
• Scheduled Maintenance: Maintenance tasks that are planned and performed at specific intervals based on time or usage to ensure consistent and reliable operation.	
Examples: Conducting annual servicing of tractors and other large machinery. Performing seasonal checks on irrigation systems. Scheduling monthly inspections of hand tools for wear and tear. Importance: Ensures that maintenance is performed regularly and systematically, helping to identify and address issues before they become serious problems.	
 In summary: Corrective Maintenance: Focuses on repairing and restoring equipment after a failure. Preventive Maintenance: Involves regular tasks to prevent failures and maintain good condition. Scheduled Maintenance: Planned maintenance at specific intervals to ensure consistent operation. Activity 3: Divide the learners in groups and have them perform basic maintenance tasks on a sample actual tool, implement or equipment. Allow them to demonstrate or practice these tasks in small groups under close supervision. 	
Task Done (√)	
Wear appropriate personal protective equipment (PPE) (e.g., gloves, goggles).	
Classify the tool, implement, or equipment to be maintained.	



Gatl	5 8			
	ntenance materials (e.g., cloth, oil,			
	sh, wrench).			
Insp	bect the item for any visible damage or			
weat				
	iew safety procedures before starting			
	task.			
B.3. Develo	ping Mastery			
Resea	arch and Reflect Activity!			
•	Group Assignment: Organize the	learners into small g	roups,	
	ensuring a mix of abilities in each g	group to promote collabo	orative	
	learning. Assign each group a specific	e farm tool, implement, o	r piece	
	of equipment. For example, one grou	p is assigned a hoe, and	other a	
	plow, and another a tractor.			
	-			
•	Research and Presentation: Have eac	signed		
	item, focusing on its function and in	d how		
	to ensure this tool, implement or e			
	group will present their findings to th			
	of the assigned tool, implement or equ			
	to farming efficiency.	1001000		
•	Guide Questions for Student Output			
	\checkmark What is the name of the tool, in		Is it	
	manually operated or powered?	ipicificité of equipificité.	10 10	
	✓ In which farming operation is it	commonly used?		
	✓ What are the recommended ma		he	
	tool, implement or equipment?	intenance activities for th		
		ain the function ality of t	lh a	
	✓ What would you do to help sust	and the functionality of t	ine	
	tool/ implement/ equipment?			
•	Rubric for Evaluation			



	Indicators	Excellent (5)	t	Satisfactory (3)	Needs Improvement (2)
C	Classification	Tool/equipme	lent	Minor errors	Incorrect or
		is correc	ctly	in naming or	unclear
		named a	and	categorization	identification
		categorized			
F	Function	Clearly a	and	Describes	Function is
		accurately		function with	unclear or
		describes		minor gaps	incorrect
		function w	vith		
		examples			
	<i>Maintenance</i>	accurate maintenance practices provided	2	Maintenance practices mostly correct	Incomplete or incorrect maintenance information
R	Reflection	honest reflection;	eep	Good reflection with some insight	Minimal or no reflection provided



C.1. Finding Practical Application Activity: Farm Management Simulation Directions: Divide the learners into four groups, ensuring a mix of abilities in each group. Assign each group one of the prepared scenarios that they will perform based on their experience using pictures or actual farm tools, implements or equipment with focus on their functions and maintenance requirements. Use simple props such as pictures or realia or actual tools during the presentation.

1. Scenario Setup:

- Scenario 1: "Preparing a field for planting."
- Scenario 2: "Maintaining a vegetable garden."
- Scenario 3: "Harvesting crops."
- Scenario 4: "Performing routine maintenance activities on farm tools, implements and equipment."

2. Process Questions:

- Ask the following questions:
 - 1. How did you determine which tools, implements, or equipment was needed for your task?
 - 2. What functions did each item serve in your scenario?
 - 3. What maintenance tasks did you perform, and why are they important?

C.2 Making Generalization

Using a Venn diagram, summarize the key points discussed by asking the following questions:

- 1. What are the main differences between farm tools, implements, and equipment?
- 2. How do the functions of these items contribute to efficient farming practices?
- 3. Why is regular maintenance important for farm tools, implements, and equipment?

C. Demonstrating Knowledge and Skills



C.3. Evaluating Learning

Directions: Think critically about the following short-answer questions. Write a brief discussion for each question, demonstrating your understanding and application of the concepts learned.

- 1. Differentiate between a farm tool, an implement, and equipment. Provide an example of each.
- 2. Imagine you are preparing a specific area for planting in the school garden. List the tools, implements, and equipment you would use and discuss the function of each in the preparation process.
- 3. Discuss three maintenance tasks that are important for keeping farm tools, implements and equipment in good condition and explain why each task is necessary.
- 4. How does regular maintenance of farm equipment impact farm productivity and safety? Provide specific examples.

C.4. Additional Activities Enrichment Activity

> E-Scrapbook Project: Farm Tools, Implements, and Equipment

The learners will create a comprehensive digital scrapbook that showcases various farm tools, implements, and equipment according to work requirement, highlighting their names and functions with a brief discussion on its maintenance. This project will enhance students' understanding of agricultural tools and their applications while integrating technology into their learning process.

Employing short-answer questions is an effective tool in the teaching and learning process. It promotes critical thinking and assesses understanding in a meaningful way by carefully designing and implementing these questions, the teacher can enhance student engagement. The frequent use of short-answer questions, coupled with constructive feedback, can significantly contribute to learners' academic growth and development.



I. Multiple Choice Directions: Read and analyze each of the following situations. Which of the following tools, implement or equipment is used according to the work required? wheelbarrow hand trowel hand cultivator spading fork digging tool harrow tractor plow hoe 1. Billy, a local farmer wants to transport manure and fertilizers to different parts of his farm. If you were Billy, which tool implement or equipment would you use? 2. Nicole wants to remove weeds and loosen the soil around her plants in her home garden. What tool would be best suited for this task? 3. Johnny is tasked with digging furrows for planting in the farm. If you were to assist Johnny, what tool would you need? 4. Every Monday afternoon, all Grade 11 Agricultural Crop Production VI. UNIT ASSESSMENTS learners of Mahavahav Farm School clean and level the (Assessing Learnings) Topsoil of the fields. Which tool or implement should they use? 5. After the propagation stage, Reniel needs to plant ampalaya seedlings from the school nursery onto the farm soil. What tool would be helpful for planting? II. Categorization of Farm Tools. Implements and Equipment **Directions:** Classify the following farm tools, implements, and equipment into appropriate categories based on their specific work functions (e.g., planting, cultivating, harvesting). For each item, write a brief explanation of its function and provide an example of its use in a farming activity. Classification Name of the farm tool, Function (Write if it is a tool, (Write a brief implement or implement or discussion of the farm equipment equipment)



			tool, implement or		
			equipment)		
	1.				
	2.				
	3.				
	4.		-		
	5.				
	Exit Ticket : At the end of the activity, have the learners write down one new thing they				Including a reflection part in the learning activities helps the
VII. REFLECTION	have learned about farm	learners connect their own			
(Feedback and	ticket by completing the statement below.				experiences and think critically
Continuous Improvement)					about its wider implications. This approach not only helps students



One new thing I learned today about farm tools/ implements/ equipment is Learning Log: Have students reflect on their learning and assess their own understanding and skills. Use prompts like: What did you find most challenging about this lesson?" How confident are you in identifying and maintaining farm tools? Let the learners rate their confidence level from 1-5 (5 as the highest and 1 is the	reflect on their learning but also provides the teacher with valuable feedback to improve their teaching strategies.
lowest).	

