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Lesson Exemplar for TLE

Quarter 2

Lesson

3

Lesson Exemplar for TLE Grade 7
Quarter 2: Lesson 3 (Week 2)
SY 2024-2025

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TLE/QUARTER 2/ GRADE 7

I. CURRICULUM CONTENT, STANDARDS, AND LESSON COMPETENCIES

A. Content Standards	The learners demonstrate an understanding of the concepts and skills in agri-crops.
B. Performance Standards	The learners perform agricultural practices in crop production based on industry standards.
C. Learning Competencies and Objectives	<p>Learning Competencies</p> <ol style="list-style-type: none"> 1. Discuss safety procedures in farm operations; and 2. Discuss hazards and risks in farm operations. <p>Learning Objectives</p> <ol style="list-style-type: none"> 1. Get aware of the safety procedures in farm operations; 2. Describe risk and hazard; 3. Cite some types of hazards; 4. Distinguish chemicals and hazardous tools and equipment used to farm work; and 5. Apply occupational safety during farm operations
D. Content	<ul style="list-style-type: none"> • Applying safety measures in farm operations • Harvesting and Post-Harvesting Practices
E. Integration	SDG 1: No Poverty, SDG 2: Zero Hunger, SDG 3: Good Health and Well-being, SDG 11: Sustainable Cities and Communities, SDG 12: Responsible Consumption and Production, SDG 13: Climate Action

II. LEARNING RESOURCES

Bituin, A.S., Calisura, R.R., Fabricante, L.L., A. & Lagus, A.V. (2022) DepEd Learning Modules in Agri-Fishery Arts. *Batangas State Caballero, X.S., Conception, J., Cristobal, R. & Gonzaga, J. (2013). Career pathways in T.L.E. 7: Home Economics. Quezon City, Food and Agricultural Materials Inspection Center [FAMIC], 2014. Basic Knowledge of Agricultural Chemicals.*

<https://www.acis.famic.go.jp/eng/chishiki/01.htm>

Moral, L.I. Jr.(2016) Technology and livelihood education series, Aquaculture. Pp.52-65. *Phoenix Publishing House.*

Philippines: Sunshine Interlinks Publishing House, Inc. <https://tinyurl.com/25fr3w6k>

Teagasc. (2023, July 13). *Farm accident re-enactment* [Video]. YouTube. <https://www.youtube.com/watch?v=ykMaCLZe-8I>

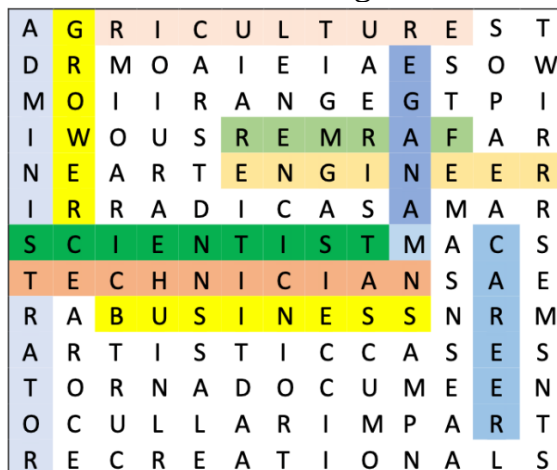
University, Balayan Campus, Caloocan Balayan, Batangas. <https://tinyurl.com/4k279ct8>

III. TEACHING AND LEARNING PROCEDURE	NOTES TO TEACHERS
<p>A. Activating Prior Knowledge</p>	<p>The teacher will ask some students to go in front and locate on the board the following words:</p> <ol style="list-style-type: none"> 1. Administrator 2. Agriculture 3. Business 4. Careers 5. Engineer 6. Farmer 7. Grower 8. Manager 9. Technician 10. Scientist <p>After locating some words each student will complete the word/s based on the previous lesson on careers or job opportunities in agriculture.</p>
<p>B. Establishing Lesson Purpose</p>	<p>The teacher will ask the students to analyze the photos presented or posted on the slides or black board.</p>

DAY 1

1. Short Review: Word Search

Directions: The students will look for the given words on the board.



2. Feedback (Optional)

1. Lesson Purpose

From the photos below, what can you say about the pictures?

Image sources:

- <https://www.facebook.com/hse.gov.uk/photos/a.365304626858521/3120218354700454/?type=3>
- <https://www.istockphoto.com/vector/worker-of-heat-stroke-gm952974274-260161860>
- <https://forums.yesterdaystractors.com/threads/rops-on-tractors-equipment.1364486/>




2. Unlocking Content Vocabulary

Which among the three important words do you think most valuable for us to maintain? Why? (explain in 3-5 sentences your response). (5 points.)

1. Hazard 2. Risk 3. Safety

- **Accident** - an unexpected and unfortunate incident that occurs accidentally and causes hurt, damage, or injury.
- **Agricultural Chemicals** – are chemical agents that are used to control crop-harming organisms (like: fungi, nematodes, mites, insects, and rodents) or viruses (refers to "diseases and pests") in the farm such as fungicides and insecticides.
- **Cleaning** - the act or process of removing dirt from tools, containers and farm facilities.
- **Chemicals** - means the interaction between substances. It can be in the form of liquid, solid or gas. It can be from any pure substance or a mixture of different substances.
- **Disinfection Chemicals** - refers to the chemical used in cleaning which has the ability to kill microorganisms especially pathogens.
- **Hazard** - can potentially harm or injure workers. In any workplace, hazard exists.
- Over fatigue, improper posture while harvesting the crops, and using unguarded machineries are some of the common hazards.
- **Incident** - refers to any remarkable or interesting event or occurrence, whether intentional or unintended.
- **Near Miss** - refers to an unanticipated event that almost harms persons or property but does not cause any injury or damage.
- **Occupational Safety** – are safe practices related to production and work process in the workplace.
- **Safety** - the physical or environmental conditions of work which comply with the prescribed Occupational Health Safety (OHS) standards and which allow the workers to perform his or her job without or within acceptable exposure to hazards
- **Safety Measures** – is an action, or procedure that is designed to lower the occurrence or risk of injury, loss and danger to persons, property or the environment.

	<ul style="list-style-type: none"> • Risk – a situation involving exposure to danger, injury or loss. • Unsafe Acts - are activities or behaviors that depart from established safety norms, such as disobeying safety guidelines or failing to properly employ personal protection equipment. • Unsafe Conditions - include physical aspects within the workplace that have the potential to cause harm, such as poor housekeeping, insufficient lighting or ventilation, malfunctioning equipment, or inappropriate handling of hazardous products. 	
C. Developing and Deepening Understanding	<p>SUB-TOPIC 1: Occupational Safety Measures in The Farm</p> <p>1. Explicitation On our yesterday's lesson, we studied about the different careers and job opportunities related to agriculture. Based on the photos that were presented a while ago, what do you think will be our lesson focus for today?</p> <p>2. Worked Example Teagasc. (2023, July 13). <i>Farm accident re-enactment</i> [Video]. YouTube. https://www.youtube.com/watch?v=ykMaCLZe-8I</p> <p>Occupational Safety When in the Farm – safety practices set by farm owners that involves production and work process of farmworkers. Farmers should always take extra measures to ensure their safety while working in the farm.</p> <p>Hazards and Risk in the Farm - farmers are exposed to a lot of risk, which can lead to major accidents or injuries. Risk is the possibility of a hazard to exist. It may cause injury or health problems. It is important that workers are properly trained and properly guided by the management.</p> <p>Types of Hazards: Hazard can potentially harm or injure workers. In any workplace, hazard exists. Over fatigue, improper posture while harvesting the crops, and using unguarded machineries are some of the common hazards.</p> <ul style="list-style-type: none"> • Physical Hazard – it includes weak platform, slippery stairs or floorings, falling objects, excessively loud music, prolonged vibration, poor 	<p>The teacher will be the one to discuss the content of the lesson and will explain very well all the items included. He/she can give real life scenario or stories that happened related to the topic.</p> <p>The teacher should emphasize the hazards of chemical fertilizers. And can give some situations about chemical hazards that may occur in the farm.</p>

ventilation, extreme temperatures, and poor air quality.

Image source: <https://agsafety.osu.edu/newsletter/ag-safety-stat/injury-prevention/recognizing-farm->

- **Mechanical Hazard** – is caused by electrically operated machineries or devices that can cause electric shock or electrocution. Pressure vessels, tractors, and cranes are all used in farm operations.

Source: <https://www.slideshare.net/ABRajar/agricultural-health-hazardspptx>



- **Chemical Hazard** – are typical of hazardous chemicals that can cause fire and explosion that came from pesticides, cleaning agents, acids, and poisons. Exposure to certain chemicals or improper handling and use of those chemicals, can cause acute or long-term adverse health effects. Main classifications of chemical hazards include: asphyxiants, corrosives, irritants, sensitizers, carcinogens, mutagens, teratogens, reactants, and flammables. Long term exposure to chemical hazards such as silica dust, engine exhausts, tobacco smoke, and lead may result to increase risk of heart disease, stroke, and high blood pressure. *Use of protective personal equipment (PPE)* is advised because it may reduce the risk of damage from contact with hazardous chemicals and materials.

Source: https://issuu.com/duduzileidunicz/docs/professional_17a0e88c952e58/s/11614121



- **Biological Hazard** – includes bacteria, viruses, mold, mildew, insects, and vermin, among others.

- **Psychosocial Hazard** – is the stresses that farmers get from work, family, or even among friends.

- **Ergonomic Hazard**- refers to any physical condition that can be experienced in the workplace due to incorrect body movement/s that can cause injury or other health concern that may affect musculoskeletal system causing aches and sprains that may appear not too



serious at first but may develop into serious health problem which can cause permanent damage to the body.

Chemicals and Hazardous Tools and Equipment Used for Farm Work

1. Spraying Chemicals - The use of fertilizers and pesticides are common in farming. These are used to control pests, weeds, and mollusks. Spraying is the most common method of applying chemicals. Farm owners consult local agriculturist for the appropriate chemicals to use in their crops.

Here are some important things to remember when using chemical for the crops:

- Do not attempt to spray if there is a strong wind and its direction is towards the body of water or a house.
- Never wash the spray equipment with water running down into open drains or towards a dam or a
- Refrain from using used chemical containers.

To reduce the risk of hazardous chemicals, do the following:

- Appropriate PPE must be used.
- Store the chemicals in locked cabinets or storage area.
- Know the first aid procedures.
- Provide a list of hazardous chemicals used in the farm.

2. Land Preparation using Heavy Equipment and Implements – the use of mechanical equipment for land preparation like tractor might involve risks such as a person being run over by it. The tractor also has the tendency to overturn, especially if it is running too fast, or the operator makes a sharp turn, sudden swerve, or sudden stop.

Here are some things to remember when using heavy farm implements:

- Do not use a tractor for transportation. It is not a passenger vehicle.
- Use a seatbelt when driving a tractor.
- Use of PPE can save the operator from serious injuries.

To avoid possible hazard and risks in the farm PPE is advised.

Safety is the physical environmental condition of work which complies with Occupational Health Safety (OHS) standards and which allows the farmers to

perform their job without or within acceptable exposure to hazards. One of the basic requirements to maintain these standards is the provision of PPE. This can reduce the number and severity of farmers related injuries and illnesses.

Farm Respiratory Protection - Since farmers use fertilizers and other chemicals, it is necessary for them to use respirators to protect themselves from inhaling mold spores and chemicals. Respirators must be properly selected, worn, and maintained to ensure maximum protection.

Source: <https://www.pinterest.com/pin/cosas-que-comprar--715790934526276793/>



Eye Protection - This is used to protect farmers' eyes from possible flying objects, liquid sprays, or other elements that may enter their eyes. There are several types of eye protectors like goggles and glasses with safety shields, among others.

Source: <https://www.amazon.com/GoggleGear-GG501SGAF-Clear-Scotchgard-Anti-fog/dp/B0BWKYKDPT>



Foot Protection - A farmers' feet is one of the most exposed parts of the body during work. Wearing appropriate footwear protects the farmer from stepping on sharp objects or animal bites. It can also protect him/her from slipping.

Source: <https://www.ebay.co.uk/p/1358744366>



Hand Protection - Farmers use gloves to protect their hands from hazardous elements such as holding chemicals or removing infested crops. Use disposable gloves when dealing with infested crops.

Source: <https://m.goldsupplier.com/Safety-Gloves/170772139.htmlom/pin/cosas-que-comprar--715790934526276793/>



Head Protection - Since farmers are commonly exposed to heat of the sun, it is important for them to wear a hat. This is also necessary to protect their head from slip or fall.

Source: <https://brainly.ph/question/23752807>
<https://ph.rs-online.com/web/p/hard-hats/2655994>



Body Protection - It comes in many forms, depending on the job. Farmers often wear long sleeve clothes and jeans. This is necessary to protect them from harmful elements.

Source: <https://www.pond5.com/3d-models/item/91428463-farmer-clothes-2>



Basic First Aid during emergency situation and accidents in the farm

Shock

1. Do not give the victim anything to eat or drink.
2. Lay the victim on his/her back but do not move him/her if there is a neck or back injury.
3. Make sure that the victim gets adequate air.
4. Keep the victim warm.
5. Raise the victim's feet and legs with a pillow.
6. If the victim vomits, roll the victim on his/her side and keep the windpipe clear.

Bleeding and Wounds

1. Place a clean cloth or gauze over the wound. Apply firm, steady pressure for at least 5 minutes.
2. Elevate an injured arm or leg above the level of the victim's heart if possible.
3. When bleeding stops, secure the cloth with a bandage. Do not lift the cloth from the wound to check if the bleeding has stopped. Be sure that the bandage is not too tight.
4. Check the victim for shock.
5. Use tourniquets only when you cannot control the bleeding.

Chemical or Compressed Gas Burns

1. Use a drench hose, emergency shower, or eyewash for at least 15 minutes to rinse away all traces of chemicals while removing any contaminated clothing from the victim.
2. Cover the burn loosely with a clean, dry cloth or special burn dressing.
3. Check the victim for shock.

Heat or Electric Burn

1. Submerge the burned area in cold, clean running water if the skin is not seriously affected.

	<p>2. Avoid applying cream or any form of ointment</p> <p>Fainting</p> <ol style="list-style-type: none"> 1. Ordinarily, fainting victims immediately regain consciousness after. If this does not happen, the victim should immediately be brought to the emergency room. 2. For the first aid, the victim should be laid down on their back and allow plenty of fresh air. Apply cold compress in the forehead and if the victim vomits, keep the windpipe clear by rolling him to his/her side. <p>Heat Stroke</p> <ol style="list-style-type: none"> 1. Heat stroke is life-threatening so this should never be taken for granted. Flush, hot and dry skin, rapid pulse, very minimal perspiration, and unconsciousness are signs of heat stroke. 2. You need to bring the victim to a cooler place and lie him/her on the back with feet up, then loosen clothing and remove footwear. Apply cold compress or wet towel on the forehead, neck, armpit, and extremities to cool the victim. Treat the victim for shock or bring the victim to the nearest hospital. <p>3. Lesson Activity</p> <p>Ask students how do they think accident happened in the farm? Then relate it to the day's topic. On the safety measures in the farm operations.</p> <p>Simulation Activity – the class can be divided into 5 groups and can simulate one emergency situation in the farm and what first aid response must be applied.</p>	
D. Making Generalizations	<p>DAY 2</p> <p>1. Learners' Takeaways</p> <p>Today, I have learned that</p> <p>_____</p> <p>_____.</p> <p>2. Reflection on Learning</p> <p>Situational Analysis: a. If in case you are a farmer, and while you are planting crops in the farm, you feel sort of hypertension attack. What action/s you are going to do?</p>	<p>The teacher may ask the students what insights they have gained from the day's lessons.</p> <p>The teacher will give the students enough time to reflect before giving their answer/s to the question. (2-3 min.)</p>

(In preparation to the next subtopic, a supplemental activity will be given.
See worksheet # 1 for the activity which students will accomplish.)

IV. EVALUATING LEARNING: FORMATIVE ASSESSMENT AND TEACHER'S REFLECTION		NOTES TO TEACHERS
A. Evaluating Learning	<p>DAY 4</p> <p>1. Formative Assessment</p> <p>Part 1: Multiple Choice</p> <p>Directions: Read the following questions carefully and circle the letter that best describes the answer.</p> <p>1.What is Occupational Safety in farm operations?</p> <ol style="list-style-type: none"> Practices that may cause injury or health problems. Practice set by farm owners that involves production and work process of farmworkers. Practices that can cause fire and explosion that come from pesticides, cleaning agents, acids, and poisons. Practice of using fertilizers and pesticides <p>2. Which term is described as the possibility of a hazard to exist?</p> <ol style="list-style-type: none"> Harm Injury Risk Safety <p>3.What is mechanical hazard?</p> <ol style="list-style-type: none"> It includes weak platform, slippery stairs, or floorings It includes bacteria, viruses, mold, mildew, insects, and vermin, among others. It can cause fire and explosion that came from pesticides, cleaning agents, acids, and poisons. It can be caused by electrically operated machineries or devices that can cause electric shock or electrocution. <p>4.Which of the following hazards includes bacteria, viruses, mold, mildew, insects, and vermin, among others?</p>	<p>The teacher will give the students ample time to answer the quiz. (5-10 min.)</p> <p>Answer Key:</p> <ol style="list-style-type: none"> b c d d d <p>Score and its Equivalents:</p> <p>10-100 9 -95 8-90 7-85 6- 80 5-75 4-70 3-65 2-60 1-50 0-0</p> <p>Note: The teacher will get the number of students who passed the quiz (passing rate). 5-10 is passing score.</p>

	<p>a. Chemical hazard c. Psychosocial environment hazard b. Physical hazard d. Biological hazard</p> <p>5. Which term is described as the physical environmental condition of work which complies with Occupational Health Safety (OHS) standards, and which allows the farmers to perform their job without or within acceptable exposure to hazards? a. Harm b. Injury c. Risk d. Safety</p> <p>2. Homework (Optional)</p>			<p>This is to know if the teacher taught the class effectively. Total no. of students who passed the test/No. of students in the class multiply by 100.</p>
B. Teacher's Remarks	<i>Note observations on any of the following areas:</i>	Effective Practices	Problems Encountered	<p>The teacher may take note of some observations related to the effective practices and problems encountered after utilizing the different strategies, materials used, learner engagement and other related stuff.</p> <p>Teachers may also suggest ways to improve the different activities explored/ lesson exemplar.</p>
	strategies explored			
	materials used			
	learner engagement/ interaction			
	others			
C. Teacher's Reflection	<p><i>Reflection guide or prompt can be on:</i></p> <ul style="list-style-type: none"> ▪ <u>principles behind the teaching</u> <i>What principles and beliefs informed my lesson?</i> <i>Why did I teach the lesson the way I did?</i> ▪ <u>students</u> <i>What roles did my students play in my lesson?</i> <i>What did my students learn? How did they learn?</i> ▪ <u>ways forward</u> <i>What could I have done differently?</i> <i>What can I explore in the next lesson?</i> 			<p>Teacher's reflection in every lesson conducted/ facilitated is essential and necessary to improve practice. You may also consider this as an input for the LAC/Collab sessions.</p>