

Learning Activity Sheets for Organic Agriculture Production

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Learning Activity Sheets for Organic Agriculture Production

Gr.11—Term 2

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LEARNING ACTIVITY SHEET (LAS)

Learning Area	ORGANIC AGRICULTURE PRODUCTION	Term	2
Lesson Exemplar	1	Date	
Lesson Title/ Topic:	Producing Organic Fertilizers <ul style="list-style-type: none"> • Principles of organic composting • Method of composting <ul style="list-style-type: none"> o vermiculture (vermi-composting) o anaerobic composting o compost tumblers o hot composting o trench composting o aerated static pile composting 		
Name:		Grade & Section	11

I. Activity No. 1: “Composting Method Experts’ Circle”

II. Objective(s): At the end of the activity, the learners should be able to:

- **explain** the principles of organic composting and describe different composting methods based on group research and discussion.
- **analyze** assigned composting methods and present key information (materials, steps, and applications) clearly through a group presentation.
- **demonstrate** teamwork, cooperation, and appreciation for environmentally responsible practices during collaborative tasks and presentations.

III. Materials Needed:

1. Printed Reference Materials (Explicitly Mentioned in Image)

From Instruction #3:

“Provide each group with short references (printed materials, photos, or teacher-prepared cards...)”

- ✓ Printed handouts / mini-cards per composting method
- ✓ Photos or images showing:
 - Vermicomposting setup (worms, bins)
 - Compost tumbler
 - Compost pile (hot composting)
 - Buried waste (trench composting)
- ✓ Description cards (method explanation, steps)

2. Presentation Materials (Explicit Output Requirement)

From Instruction #5:

“Poster, chart, or demonstration using improvised materials”

- ✓ Manila paper / cartolina (for posters)
- ✓ Marker pens (for writing content)
- ✓ Colored pens / crayons (for visual presentation)
- ✓ Tape or glue (for attaching photos or labels)
- ✓ Scissors (for cutting materials/images)

3. Improvised Demonstration Materials (Clearly Implied)

From:

“Demonstration using improvised materials”

Based on composting methods listed in the image:

Possible Materials per Method:

- ✓ Plastic containers / bins (for vermicompost or anaerobic setup)
- ✓ Soil / compost sample
- ✓ Kitchen waste (fruit peels, vegetable scraps)
- ✓ Dried leaves / paper (carbon materials)
- ✓ Worms (or simulated using pictures/models)
- ✓ Small shovel / trowel
- ✓ Plastic bottles / drums (for tumbler simulation)
- ✓ PVC pipe or sticks (for aeration demonstration)

4. Group Work & Organization Materials (Implied from Group Activity)

- ✓ Group labels (Group 1–6)
- ✓ Activity instruction sheets
- ✓ Guide questions (printed or written on board)
- ✓ Timer (for 3–5-minute presentation)

5. Writing and Documentation Materials

- ✓ Notebook / paper (for planning answers)
- ✓ Ballpen or pencil
- ✓ Meta cards (for key points during presentation)

6. Teacher Facilitation Materials (Implied)

- ✓ Board (blackboard/whiteboard)
- ✓ Chalk or markers
- ✓ Rubric or evaluation checklist (for presentations)

IV. Instructions:

1. Divide the class into 6 groups.
2. Each group becomes the **“Expert Team”** for one composting method:
 - Vermiculture (Vermi-composting)
 - Anaerobic composting
 - Compost tumblers
 - Hot composting
 - Trench composting
 - Aerated static pile composting
3. Provide each group with short references (printed materials, photos, or teacher-prepared cards describing their assigned method).
4. Students collaborate to analyze their composting method and answer the guide questions.
5. Each group creates a 3–5-minute mini-presentation (poster, chart, or demonstration using improvised materials).
6. Class forms a large circle, and each group presents their composting method to the class-teaching classmates like “experts.”

Guide Questions (Group Discussion)

1. What is the main idea behind your assigned composting method?
2. What materials are needed for this method?
3. What are the steps involved in setting it up?
4. How does this method follow the principles of organic composting? (C:N ratio, moisture, aeration, temperature)
5. What are the advantages and limitations of your composting method?
6. Where is this method best used?
(home, school, farm, small space, large-scale operations)

Reporting Output (Simple Format)

- Each group must present:
 - Name of the composting method
 - Short explanation (2–3 sentences)
 - Materials needed
 - Steps
 - Pros & cons
 - Recommended application

I. Activity No. 2: “Build-Your-Own Composting Setup”

II. Objective(s):

At the end of the activity, the learners should be able to:

- **Identify** the materials, tools, steps, and principles of organic composting (C:N ratio, moisture, aeration, and temperature).
- **Design** a simple composting setup using a selected composting method and demonstrate proper procedures and safety practices.
- **Value** the importance of composting by selecting appropriate methods and applying them responsibly in real-life situations.

III. Materials Needed:

1. Organic Materials (for Composting)

- Kitchen waste (vegetable and fruit peels)
- Grass clippings
- Dried leaves / paper (brown materials)
- Animal manure (optional)
- Garden waste (twigs, plant trimmings)

2. Containers and Structures (Depends on Method)

- Plastic bins or containers (for vermicomposting, anaerobic)
- Compost tumbler (or improvised drum/bottle)
- Sack, box, or wooden crate (for simulation)
- Soil pit or trench area (for trench composting)
- Large pile space (for hot composting / static pile)

3. Tools and Equipment

- Small shovel / trowel
- Rake or stick (for mixing/turning)
- Watering can or spray bottle (for moisture control)
- Measuring container (optional for materials ratio)

4. Special Materials (Method-Specific)

- Worms (for vermiculture, e.g., African night crawlers)
- PVC pipes / perforated pipes (for aerated static pile)
- Cover materials (plastic sheet, sack) for moisture control

5. Safety and Sanitation Materials

- Gloves (rubber or plastic)
- Face mask (optional)
- Apron or old clothes
- Hand soap / alcohol (for cleaning after activity)

6. Planning and Documentation Materials

- Bond paper / notebook (for planning and listing materials)
- Pencil or ballpen
- Manila paper or cartolina (for setup diagram or labeling)
- Marker pens

7. Labeling and Presentation Materials

- Labels or tags (for parts of the compost setup)
- Tape or glue

- Visual aids (optional drawings/diagrams)
- 8. Simulation Materials (if no actual setup)**
 - Cardboard boxes (for model compost bin)
 - Plastic bottles or mini containers
 - Colored paper (to represent green and brown materials)

IV. Instructions:

“Build Your Own Composting Setup”

Directions for Learners

1. Review Prior Knowledge

Recall the principles of organic composting and the characteristics of your chosen composting method.

2. Form Groups and Select a Method

Work in small groups and choose one composting method:

- Vermiculture
- Anaerobic composting
- Compost tumbler
- Hot composting
- Trench composting
- Aerated static pile composting

3. Plan the Composting Setup

Create a simple **sketch or blueprint** showing how your composting system will be arranged.

4. Identify Materials and Tools

List the materials and tools needed, such as:

- Organic waste (vegetable scraps, dried leaves, etc.)
- Containers, bins, or pits
- Worms (for vermiculture)
- Pipes or ventilation materials (for aeration)
- Safety equipment

5. Simulate or Construct the Setup

Depending on available space, your group may:

- **Simulate** the setup using improvised materials (boxes, models, samples), or
- **Construct** a simple composting setup in the school area

6. Apply Composting Principles

Demonstrate proper application of:

- Carbon-to-Nitrogen (C:N) ratio (greens and browns)
- Proper moisture level
- Adequate aeration or controlled oxygen
- Proper layering of materials

7. Observe Safety and Sanitation Practices

Follow proper handling of materials and maintain cleanliness in your workspace.

8. **Present Your Output**

Deliver a **3–5-minute group presentation** explaining:

- Your chosen composting method
- Materials and setup
- How it works
- Where it can be applied (home, school, farm, community)

I. Activity No. 3: “Set Up a Simple Composting System”

II. Objective(s):

At the end of the activity, the learners should be able to:

- **Explain** the different composting methods and the principles of organic composting (C:N ratio, moisture, aeration, and temperature) applied in setting up a composting system.
- **Construct** a simple composting system by accurately selecting materials, following proper procedures, and applying composting principles.
- **Demonstrate responsibility** by practicing proper composting techniques and selecting appropriate methods for real-life use.

III. Materials Needed:

1. Organic Composting Materials

- Vegetable and fruit peels (kitchen waste)
- Dried leaves / paper (brown materials)
- Grass clippings
- Garden waste (twigs, plant trimmings)
- Animal manure (optional)

2. Containers / Composting Structures (Depending on Method)

- Plastic bins or containers
- Compost tumbler (or improvised drum/bottle)
- Sack, box, or wooden crate
- Soil pit or trench area
- Space for compost pile

3. Tools and Equipment

- Small shovel / trowel
- Stick or rake (for mixing/turning)
- Watering can or spray bottle
- Bucket or container for collecting materials

4. Special Materials (Method-Based)

- Worms (for vermicomposting)
- PVC or perforated pipes (for aerated static pile)
- Plastic cover, sack, or lid (for moisture and odor control)

5. Safety and Sanitation Materials

- Gloves
- Face mask (optional)
- Apron or old clothes
- Soap / alcohol for cleaning hands

6. Presentation and Explanation Materials

- Manila paper or bond paper
- Marker or pen
- Labels or tags (for identifying parts of the setup)

IV. Instructions:

Directions for Learners

1. **Select a Composting Method**

Choose one composting method from the following:

- Vermicomposting
- Anaerobic composting
- Compost tumbler
- Hot composting
- Trench composting
- Aerated static pile composting

2. **Prepare the Needed Materials**

Gather the required materials, tools, and equipment based on your chosen method, including:

- Organic waste (greens and browns)
- Containers or composting structure
- Tools (shovel, rake, watering can)
- Special materials (worms, pipes, covers)
- Safety materials (gloves, mask, apron)

3. **Plan the Composting Setup**

Organize how your composting system will be constructed. Decide:

- Arrangement of materials
- Placement of layers
- Type of container or location

4. **Construct the Composting System**

Set up your composting system by:

- Layering organic materials properly (greens and browns)
- Arranging tools and structures correctly
- Ensuring stability and cleanliness of the setup

5. **Apply Composting Principles**

Demonstrate the correct application of:

- Carbon-to-Nitrogen (C:N) ratio
- Proper moisture level
- Adequate aeration or controlled oxygen
- Suitable temperature conditions

6. **Observe Safety and Sanitation Practices**

- Wear appropriate protective equipment (gloves, mask, apron)
- Handle materials properly
- Clean the work area after the activity

7. Explain the Setup

Present your composting system and:

- Describe how it works
- Explain the materials and steps used
- Show how composting principles are applied
- Justify why the method is suitable for real-life use

Rubric criteria may assess:

- Accuracy of procedures
- Proper use of materials
- Application of composting principles
- Clarity of explanation

Performance Task Rubric: Composting Activity

Criteria	5 – Excellent (5 pts)	4 – Very Good (4 pts)	3 – Satisfactory (3 pts)	2 – Needs Improvement (2 pts)	1 – Poor (1 pt.)
1. Accuracy of Procedures	100% of steps are correct, complete, and in proper sequence (no errors).	80–99% of steps are correct; 1–2 minor errors but sequence is maintained.	60–79% of steps are correct; some steps incomplete or slightly out of order.	40–59% of steps are correct; several missing or incorrect steps.	Below 40% correct; procedure mostly incorrect or incomplete.
2. Proper Use of Materials	All materials (100%) are used correctly, efficiently, and safely at all times.	Most materials (80–99%) are used properly; minor misuse observed once.	Materials used adequately (60–79% correct use); occasional inefficiency or errors.	Frequent misuse (40–59% correct use); needs constant guidance.	Materials mostly misused (<40% correct use) or handled unsafely.
3. Application of Composting Principles	Applies all key principles correctly (C:N ratio, moisture, aeration) with no errors (100% accuracy).	Applies most principles correctly (80–99% accuracy); minor misunderstanding.	Applies basic principles (60–79% accuracy); some incorrect application.	Limited application (40–59% accuracy); major concepts misunderstood.	Little to no application (<40% accuracy); lacks understanding of principles.
4. Clarity of Explanation	Explanation is clear, complete, and organized; includes all key points (100% clarity, no gaps).	Mostly clear explanation (80–99%); minor missing details.	Adequate explanation (60–79%); some points unclear or lacking detail.	Explanation unclear (40–59%); several key points missing.	Explanation is confusing or off-topic (<40% clarity).

Scoring Guide

- **Total Score:** 20 points
- **Performance Levels:**
 - 18–20 = Excellent
 - 14–17 = Very Good
 - 10–13 = Satisfactory
 - 6–9 = Needs Improvement
 - 1–5 = Poor

I. Activity No. 4: “My Home Composting Plan”

II. Objective(s):

At the end of the activity, the learners should be able to:

- **describe** suitable composting methods and identify the materials, space, and steps needed for home composting.
- **develop** a simple home composting plan by organizing available resources and outlining clear procedures.
- **show** environmental responsibility by planning practical ways to manage organic waste at home through composting.

III. Materials Needed:

1. Planning and Writing Materials

- Bond paper / worksheet (for the composting plan)
- Notebook
- Ballpen or pencil

2. Visual and Presentation Materials

- Manila paper or cartolina (for clean presentation)
- Marker pens
- Colored pens / crayons (for illustrations or sketches)

3. Reference Materials

- Printed notes or handouts about composting methods
- Photos or sample images (optional)
- Teacher guide or examples

4. Drawing / Layout Materials

- Ruler (for sketching layout or space plan)
- Pencil and eraser

5. Optional Materials

- Sample home layout (if available)
- Pictures cut from magazines (for creative plan)

IV. Instructions:

Directions for Learners

1. Recall Prior Learning

Review the different composting methods and the principles of organic composting (C:N ratio, moisture, aeration, and temperature).

2. Choose a Suitable Composting Method

Select one composting method that is most practical for your home setting (e.g., vermicomposting, trench composting, compost bin, etc.).

3. Analyze Your Available Space and Resources

Think about your home environment:

- Available space (backyard, small space, garden)
- Available materials (kitchen waste, leaves, containers)

4. Plan Your Home Composting Setup

On bond paper or worksheet, create a **simple composting plan** that includes:

- Type of composting method
 - Materials and tools needed
 - Step-by-step procedure
 - Location of setup at home
5. **Draw or Sketch the Layout**
Make a **simple diagram or layout** of your composting system using a ruler and drawing materials.
- Label important parts (container, materials, layers, etc.)
6. **Apply Composting Principles**
Show in your plan how you will:
- Balance green and brown materials (C:N ratio)
 - Maintain proper moisture
 - Ensure aeration or control oxygen
 - Manage temperature
7. **Prepare a Clean Presentation Output**
Transfer your final plan to manila paper or present neatly on bond paper.
- Use markers or colors for clarity
 - Include labels and short explanations
8. **Share Your Plan (Optional/If required)**
Present your composting plan to the class and explain how it can be applied at home.

Guide Questions (Planning Phase)

1. What composting method is most suitable for your home? Why?
2. What materials and tools are available in your home for composting?
3. Where will you set up your composting system at home?
4. What steps will you follow to start and maintain your compost?
5. How will you apply the principles of composting (C:N ratio, moisture, aeration, temperature) in your plan?

Guide Questions (Application & Understanding)

1. How will your composting plan help reduce organic waste at home?
2. What possible problems may you encounter in maintaining your compost system?
3. How can you ensure cleanliness and safety while composting at home?
4. How can your compost be used to benefit plants or your garden?

Reflection Questions (Individual Task)

1. Why is composting important in managing household waste?
2. What did you learn from designing your own composting plan?
3. How can you encourage your family or community to practice composting?
4. What values did you develop while planning this activity?
5. How can home composting contribute to environmental sustainability?

RUBRIC CRITERIA: “My Home Composting Plan”
Scoring Guide

- 5** – Outstanding
4 – Very Satisfactory
3 – Satisfactory
2 – Needs Improvement
1 – Poor

Criteria	5 - Excellent	4 - Very Good	3 - Good	2 - Needs Improvement	1 - Poor
Understanding of Composting Method	Clearly and accurately explains the chosen method and principles	Minor errors in explanation	Basic understanding shown	Limited understanding	No clear understanding
Completeness of Plan (materials, space, steps)	All parts are complete and well-organized	Most parts are complete	Some parts are missing	Many parts are incomplete	Plan is unclear or missing
Application of Composting Principles (C:N ratio, moisture, aeration, temperature)	Principles are clearly applied and explained	Most principles are applied	Some principles are applied	Minimal application of principles	No application shown
Organization and Presentation	Very neat, clear, and visually appealing	Generally neat and organized	Acceptable presentation	Disorganized or unclear	Very messy or incomplete
Environmental Awareness	Strong awareness and practical application for home use	Shows good awareness	Some awareness shown	Limited awareness	No awareness shown

Synthesis:

This lesson highlights that composting goes beyond simple waste management and plays an important role in caring for the environment. It emphasizes understanding different composting methods and how these can be applied based on available materials and space. The activities encourage collaboration and show the importance of teamwork and sharing ideas to develop effective solutions. They also demonstrate the value of following proper procedures and applying key composting principles such as balance, moisture, aeration, and temperature. In addition, the lesson promotes practical application by connecting learning to real-life situations, particularly in home and community settings. Overall, it helps learners develop responsibility and awareness, showing how small, consistent actions can contribute to sustainable practices and environmental protection.

LEARNING ACTIVITY SHEET (LAS)

Learning Area	ORGANIC AGRICULTURE PRODUCTION	Term	2
Lesson Exemplar	2	Date	
Lesson Title/Topic:	Maturity Indices of Vegetables		
Name		Grade & Section	11

Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: Identify One!

II. Objective(s): At the end of the activity, you should be able to

- A. Classify vegetables based on their maturity stage.
- B. Explain the maturity indices of vegetables such as color, size, and firmness.
- C. Demonstrate responsibility in selecting vegetables at the proper stage of maturity.

III. Materials Needed:

Actual vegetables
Learning Activity sheets

IV. Instructions:

Directions: Identify at least one (1) vegetable that you can see in your school. Identify and classify whether the selected vegetable is ready to harvest based on the maturity stage. Explain the maturity indices that can be observed to the selected vegetable. Use the rubric provided by your teacher.

Vegetable	Maturity Indicator	Ready/Not Ready

LEARNING ACTIVITY SHEET (LAS)

Learning Area	ORGANIC AGRICULTURE PRODUCTION	Term	2
Lesson Exemplar	2	Date	
Lesson Title/Topic:	Maturity Indices of Vegetables		
Name		Grade & Section	11

Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: Ready Get Set Go!

II. Objective(s): At the end of the activity, you should be able to

- A. Classify vegetables based on their maturity stage.
- B. Explain the maturity indices of vegetables such as color, size, and firmness.
- C. Demonstrate responsibility in selecting vegetables at the proper stage of maturity.

III. Materials Needed:

Actual vegetables (tomato, eggplant, peachy)
Or Visual aids (pictures of vegetables at different maturity stages)
Learning Activity sheets

IV. Instructions:

Directions: In your home or in your community, observe different vegetables. Identify at least three (3) vegetables and describe their maturity indicators such as color, size, and firmness. Decide whether each vegetable is ready for harvest or not.

Use the given format:

Vegetable Name	Maturity Indicators	Ready for Harvest/ Not Ready	Reason
1.			
2.			
3.			

LEARNING ACTIVITY SHEET (LAS)

Learning Area	ORGANIC AGRICULTURE PRODUCTION	Term	2
Lesson Exemplar	2	Date	
Lesson Title/Topic:	Maturity Indices of Vegetables		
Name		Grade & Section	11

Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: Assessment

II. Objective(s): At the end of the activity, you should be able to

- A. Classify vegetables based on their maturity stage.
- B. Explain the maturity indices of vegetables such as color, size, and firmness.
- C. Demonstrate responsibility in selecting vegetables at the proper stage of maturity.

III. Materials Needed:

Learning Activity sheets

IV. Instructions:

A. **Directions:** Read and analyze the following questions. Answer in 2-3 sentences.

1. What are maturity indices of vegetables?

2. Give three (3) examples of maturity indices.

3. Why is it important to consider maturity indices before harvesting vegetables?

B. **Directions:** Study each vegetable. Classify each as Ready for Harvest or Not Yet Ready For Harvest

TASK 2: CLASSIFICATION ACTIVITY

Look at the vegetables below. Classify each as **READY FOR HARVEST** or **NOT YET READY FOR HARVEST**.

VEGETABLE EXAMPLE	NOT YET READY FOR HARVEST	READY FOR HARVEST	CLASSIFICATION (✓)
1. Tomato (deep red color, firm)			
2. Eggplant (small, shiny purple)			
3. Cabbage (loose leaves, small head)			
4. Corn (dry silks, filled kernels)			
5. Ampalaya (green, firm, full size)			

Remember: Observe the **color**, **size**, and **firmness** to determine if the vegetable is ready for harvest.

Generated by AI-Chatgpt: https://chatgpt.com/file_985071fd

C. **Directions:** Answer the questions in 2-3 sentences. Explain your idea clearly and show responsibility and good decision-making in your answer.

“Why is it important for farmers or gardeners to carefully choose vegetables at the correct stage of maturity?”

V. Synthesis

This Learning Activity Sheet develops learners’ ability to classify vegetables by maturity stage using indicators such as color, size, and firmness. Through different activities, students practice responsible decision-making in selecting vegetables at the proper stage of maturity. The assessment reinforces knowledge, skills, and values, ensuring learners connect classroom concepts to real-life farming practices.

LEARNING ACTIVITY SHEET (LAS)

Learning Area	ORGANIC AGRICULTURE PRODUCTION	Term	2
Lesson Exemplar	3	Date	
Lesson Title/Topic:	Harvesting		
Name		Grade & Section	11

Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: Identify the Harvesting Information

II. Objective(s): At the end of the activity, you should be able to

1. Identify proper harvesting methods and correct harvesting schedule of common vegetables.
2. Perform appropriate harvesting techniques using proper tools.
3. Show responsibility and care in harvesting using appropriate tools.

III. Materials Needed:

Learning Activity Sheet

IV. Instructions:

Directions: Complete the table by selecting 1 vegetable of your choice and provide necessary information asked like providing the harvesting method, proper tool to be used and harvesting schedule of the vegetable of your groups choice.

Vegetable	Harvesting Method	Proper Tool	Harvesting Schedule

LEARNING ACTIVITY SHEET (LAS)

Learning Area	ORGANIC AGRICULTURE PRODUCTION	Term	2
Lesson Exemplar	3	Date	
Lesson Title/Topic:	Harvesting		
Name		Grade & Section	11

Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: Hands-On Harvest

II. Objective(s): At the end of the activity, you should be able to

- A. Identify proper harvesting methods and correct harvesting schedule of common vegetables.
- B. Perform appropriate harvesting techniques using proper tools.
- C. Show responsibility and care in harvesting using appropriate tools.

III. Materials Needed:

knife, scissors, basket, gloves, worksheets

IV. Instructions:

Directions: Perform the proper harvesting procedures. You will be graded according to proper observation on the harvesting process, proper handling, following proper procedures, and participated actively in the group. You will perform 1 group at a time.

Criteria	Yes (✓)	No (X)
1. Applied correct harvesting method (e.g., proper picking or cutting)	☐	☐
2. Handled crops carefully to avoid damage	☐	☐
3. Followed instructions and demonstrated the procedure correctly	☐	☐
4. Participated actively in the group activity	☐	☐

LEARNING ACTIVITY SHEET (LAS)

Learning Area	ORGANIC AGRICULTURE PRODUCTION	Term	2
Lesson Exemplar	3	Date	
Lesson Title/Topic:	Harvesting		
Name		Grade & Section	11

Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: Additional Activities

II. Objective(s): At the end of the activity, you should be able to

- A. Identify proper harvesting methods and correct harvesting schedule of common vegetables.
- B. Perform appropriate harvesting techniques using proper tools.
- C. Show responsibility and care in harvesting using appropriate tools.

III. Materials Needed:

At least 1 vegetable, drawing materials, camera

IV. Instructions:

Look for one (1) vegetable available at home or within the school premises. Carefully observe the vegetable based on its color, size, and firmness. Using the provided checklist, determine whether the vegetable is ready for harvest or not. Attach or draw a picture/photo of their chosen vegetable.

Indicators	Yes	No
1. The vegetable has the proper color for harvesting.	☐	☐
2. The vegetable has reached the proper size.	☐	☐
3. The vegetable feels firm and fresh.	☐	☐
4. The vegetable looks healthy and not damaged.	☐	☐
5. The vegetable appears mature and ready for harvest.	☐	☐

LEARNING ACTIVITY SHEET (LAS)

Learning Area	ORGANIC AGRICULTURE PRODUCTION	Term	2
Lesson Exemplar	3	Date	
Lesson Title/Topic:	Harvesting		
Name		Grade & Section	11

Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: Assessment

II. Objective(s): At the end of the activity, you should be able to

- A. Identify proper harvesting methods and correct the harvesting schedule of common vegetables.
- B. Perform appropriate harvesting techniques using proper tools.
- C. Show responsibility and care in harvesting using appropriate tools.

III. Materials Needed:

Learning Activity Sheet

IV. Instructions:

Harvest and Explain

Directions: Determine whether the vegetable is ready for harvest or not. Identify the appropriate harvesting method and the best time after harvesting. Individually perform the correct harvesting technique or simulate it if actual performance isn't possible. Ask the learners the following questions:

1. Why is the vegetable ready or not ready?

2. How does proper handling prevent damage?

V. Synthesis

This LAS helps learners to identify proper harvesting methods and schedules, use appropriate tools like knives, scissors, and baskets, and demonstrate responsibility in handling crops carefully. The assessment reinforces correct techniques, careful handling, and decision-making, ensuring learners develop both skills and values in agricultural production.

LEARNING ACTIVITY SHEET (LAS)

Learning Area	ORGANIC AGRICULTURE PRODUCTION	Term	2
Lesson Exemplar	4	Date	
Lesson Title/Topic:	Post-harvest handling operations		
Name		Grade & Section	11

Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: Flowchart Creation

II. Objective(s): At the end of the activity, you should be able to

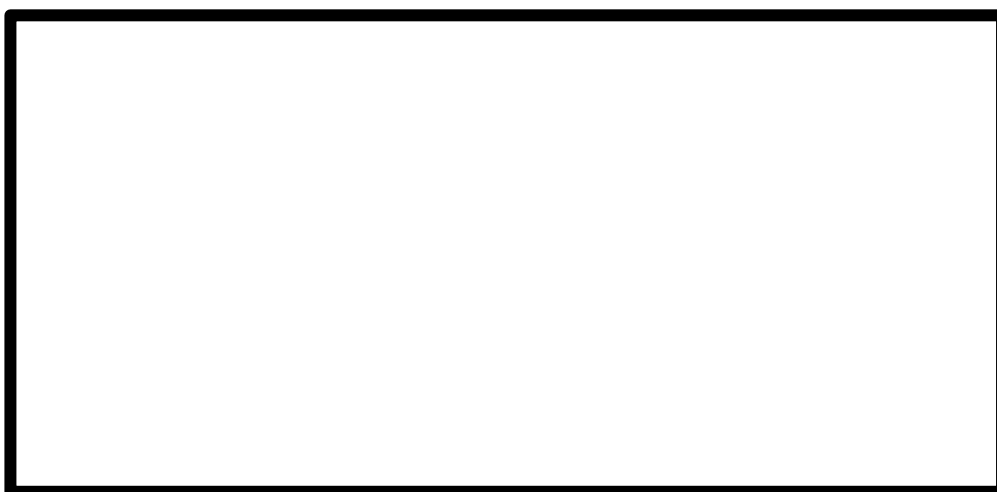
1. Explain the importance of proper post-harvest handling operations such as trimming, sorting and sizing
2. Perform proper trimming, sorting, and sizing of harvested vegetables based on quality and size.
3. Demonstrate responsibility and cooperation in handling harvested vegetables carefully to reduce post-harvest losses.

III. Materials Needed:

Learning Activity Sheet

IV. Instructions:

1. Create a flowchart showing the correct post-harvest handling procedures.
2. Present the flowchart creatively.
3. Use the Rubrics for grading the outputs of the learners



LEARNING ACTIVITY SHEET (LAS)

Learning Area	ORGANIC AGRICULTURE PRODUCTION	Term	2
Lesson Exemplar	4	Date	
Lesson Title/Topic:	Post-harvest handling operations		
Name		Grade & Section	11

Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: Post-Harvest Station Rotation

II. Objective(s): At the end of the activity, you should be able to

- A. Explain the importance of proper post-harvest handling operations such as trimming, sorting and sizing
- B. Perform proper trimming, sorting, and sizing of harvested vegetables based on quality and size.
- C. Demonstrate responsibility and cooperation in handling harvested vegetables carefully to reduce post-harvest losses.

III. Materials Needed:

Harvested vegetables , Scissors, knife, baskets, weighing scale, trays

IV. Instructions:

- 1. Observe harvested vegetables from the school garden or available vegetables at home.
- 2. Perform trimming, sorting, sizing, and grading.
- 3. Separate damaged produce from quality produce.
- 4. Complete the post-harvest checklist.
- 5. Explain how proper handling can help farmers and consumers.
- 6. Use the checklist for the grading of the activity.

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Lesson Exemplar	4	Date	
Lesson Title/Topic:	Post-harvest handling operations		
Name		Grade & Section	11

Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: EVALUATING LEARNING

II. Objective(s): At the end of the activity, you should be able to

- A. Explain the importance of proper post-harvest handling operations such as trimming, sorting and sizing
- B. Perform proper trimming, sorting, and sizing of harvested vegetables based on quality and size.
- C. Demonstrate responsibility and cooperation in handling harvested vegetables carefully to reduce post-harvest losses.

III. Materials Needed:

Learning Activity Sheets

IV. Instructions:

Directions: Read each statement carefully. Identify whether the statement describes **Trimming, Sorting, Sizing, or Grading**. Write your answer on the space provided.

1. Removing damaged leaves, roots, or unwanted parts of vegetables before storage or selling.

2. Separating vegetables according to their quality such as good, damaged, or defective produce.

3. Grouping vegetables according to their physical dimensions such as small, medium, or large.

4. Classifying vegetables based on overall appearance, freshness, and market quality.

5. Cut off excess stems and spoiled portions of harvested vegetables.

6. Arranging vegetables according to similar sizes to make packaging easier.'

7. Separate cracked, bruised, or rotten vegetables from fresh and healthy produce.

8. Determining which vegetables are premium quality and which are lower quality.

9. Removing unnecessary plant parts to improve the appearance of vegetables.

10. Organizing harvested vegetables into categories based on size and shape.

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Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: ADDITIONAL ACTIVITIES

II. **Objective(s):** At the end of the activity, you should be able to

- A. Explain the importance of proper post-harvest handling operations such as trimming, sorting and sizing
- B. Perform proper trimming, sorting, and sizing of harvested vegetables based on quality and size.
- C. Demonstrate responsibility and cooperation in handling harvested vegetables carefully to reduce post-harvest losses.

III. Materials Needed:

IV. Instructions:

- 1. Visit a nearby market, home garden, or farm.
- 2. Observe how vegetables are handled after harvesting.
- 3. Interview a farmer, vendor, or family member about post-harvest practices.
- 4. Write a short reflection about the importance of proper post-harvest handling.

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Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: ASSESSMENT

II. Objective(s): At the end of the activity, you should be able to

- A. Explain the importance of proper post-harvest handling operations such as trimming, sorting and sizing
- B. Perform proper trimming, sorting, and sizing of harvested vegetables based on quality and size.
- C. Demonstrate responsibility and cooperation in handling harvested vegetables carefully to reduce post-harvest losses.

III. Materials Needed:

Learning Activity Sheet

IV. Instructions:

Directions: Read each situation carefully and choose the best answer.

1. After harvesting vegetables in the school garden, a group of students noticed that some leaves were wilted and damaged. They removed these parts before packing. What post-harvest operation did they perform?

- A. Harvesting
- B. Sizing
- C. Sorting
- D. Trimming

2. A vendor is preparing vegetables for display. She separates good-quality tomatoes from those that are bruised or overripe. What process is being applied?

- A. Grading
- B. Packaging
- C. Sizing
- D. Sorting

3. Before selling carrots, a farmer groups them into small, medium, and large sizes. What post-harvest activity is being demonstrated?

- A. Grading
- B. Sizing
- C. Sorting
- D. Trimming

4. A buyer prefers vegetables that are uniform in size and appearance. A farmer prepares his produce accordingly. Which practice helps meet this market demand?

- A. Harvesting
- B. Sizing
- C. Sorting
- D. Watering

5. During post-harvest activity, students noticed some vegetables had insect damage. They separated them from the good ones. What is the main purpose of this action?

- A. Reduce quality
- B. Increase weight
- C. Improve storage
- D. Maintain freshness

6. A farmer wants to increase the market value of his vegetables. He removes unwanted roots and leaves before selling them. What is the effect of this practice?

- A. Faster growth
- B. Lower quality
- C. Larger harvest
- D. Better appearance

7. In a cooperative, members carefully handle vegetables to avoid bruising during packing. What value is being demonstrated?

- A. Competition
- B. Indifference
- C. Laziness
- D. Responsibility

8. A group of learners mixes damaged vegetables with fresh ones during packing. What is the likely consequence?

- A. Better quality
- B. Faster selling
- C. Higher price
- D. Lower market value

9. A farmer sorts of vegetables based on size and quality before transporting them to the market. What is the combined purpose of this practice?

- A. Delay harvest
- B. Reduce waste
- C. Improve pricing
- D. Increase spoilage

10. During a school activity, students work together to complete trimming, sorting, and sizing tasks efficiently. What skill is most evident?

- A. Individual effort
- B. Random selection
- C. Team coordination
- D. Competitive behavior

11. A vegetable buyer refuses to purchase a batch because it contains mixed sizes and damaged produce. What could have prevented this situation?

- A. Proper sorting
- B. Proper watering
- C. Proper planting
- D. Proper trimming

12. A farmer removes excess stems and damaged parts from harvested cabbage. What operation is being applied?

- A. Grading
- B. Sizing
- C. Sorting
- D. Trimming

13. Vegetables are classified into premium, standard, and low quality before being sold. What process is being described?

- A. Grading
- B. Sizing
- C. Sorting
- D. Trimming

14. Students observe that careful handling of vegetables reduces losses during transport. What concept does this best illustrate?

- A. Soil fertility
- B. Plant growth
- C. Seed germination
- D. Post-harvest losses

15. A farmer carefully separates vegetables based on both size and quality before packaging. Which statement best describes this practice?

- A. It changes crop type
- B. It reduces harvest time
- C. It improves market value
- D. It increases soil nutrients

V. Synthesis

This LAS develops learners' understanding and skills in trimming, sorting, sizing, and grading vegetables as essential post-harvest handling operations. Through activities like flowchart creation, station rotation, and checklist evaluation, students learn the importance of proper handling to maintain quality, reduce losses, and improve market value. The assessment reinforces knowledge of each process while promoting responsibility, cooperation, and care in handling produce, ensuring learners connect classroom practice with real-world agricultural applications.

LEARNING ACTIVITY SHEET (LAS)

Learning Area	ORGANIC AGRICULTURE PRODUCTION	Term	2
Lesson Exemplar	5	Date	
Lesson Title/Topic:	Post-harvest handling operations		
Name		Grade & Section	11

Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: Community Market Solution

II. Objective(s): At the end of the activity, you should be able to

- ✓ Explain the importance of proper washing, packaging, labeling, and recording of harvested vegetables.
- ✓ Perform proper post-harvest handling operations using appropriate materials and procedures.
- ✓ Demonstrate responsibility, cleanliness, cooperation, and appreciation in handling harvested vegetables to reduce waste and maintain quality.

III. Materials Needed:

Learning Activity Sheet

IV. Instructions:

In Barangay Marag, many vegetable vendors at the local market have been complaining about the fast spoilage of their harvested vegetables, especially tomatoes, pechay, and eggplant. Some vegetables start to wilt, turn soft, or develop dark spots just one or two days after being displayed for sale.

Several vendors admit that after harvesting, the vegetables are sometimes:

- Not washed properly or are washed using unsafe water
- Mixed together without sorting according to quality
- Packed in old sacks or poorly ventilated containers
- Not labeled, making it difficult to track harvest dates and sources
- Not properly recorded, so farmers and sellers cannot monitor how long the produce has been stored or transported

Because of these issues, customers often complain about poor quality, and vendors experience financial loss due to unsold or rejected vegetables.

1. Read the given situation about vegetable spoiling quickly in a local market.
2. Discuss the possible causes of spoilage with your group.
3. Propose practical solution using proper post-harvest handling practices.
4. Present recommendation through a short role play.
5. Use the rubric for the evaluation of the performance.

LEARNING ACTIVITY SHEET (LAS)

Learning Area	ORGANIC AGRICULTURE PRODUCTION	Term	2
Lesson Exemplar	5	Date	
Lesson Title/Topic:	Post-harvest handling operations		
Name		Grade & Section	11

Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: Perform Me!

II. Objective(s): At the end of the activity, you should be able to

- ✓ Explain the importance of proper washing, packaging, labeling, and recording of harvested vegetables.
- ✓ Perform proper post-harvest handling operations using appropriate materials and procedures.
- ✓ Demonstrate responsibility, cleanliness, cooperation, and appreciation in handling harvested vegetables to reduce waste and maintain quality.

III. Materials Needed:

Fresh vegetables (eggplant, tomato, pechay, okra, squash)

- Crates and baskets
- Clean water and washing basin
- Labels and marker
- Packaging materials

IV. Instructions:

1. Individually perform proper washing, sorting, packaging, and labeling of vegetables.
2. Record harvested products accurately in the logbook.
3. Follow cleanliness and safety procedures throughout the activity.
4. Use the rubric for the evaluation of performance.

LEARNING ACTIVITY SHEET (LAS)

Learning Area	ORGANIC AGRICULTURE PRODUCTION	Term	2
Lesson Exemplar	5	Date	
Lesson Title/Topic:	Post-harvest handling operations		
Name		Grade & Section	11

Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: Poster of Preservation

II. Objective(s): At the end of the activity, you should be able to

- ✓ Explain the importance of proper washing, packaging, labeling, and recording of harvested vegetables.
- ✓ Perform proper post-harvest handling operations using appropriate materials and procedures.
- ✓ Demonstrate responsibility, cleanliness, cooperation, and appreciation in handling harvested vegetables to reduce waste and maintain quality.

III. Materials Needed:

Drawing Materials

IV. Instructions:

1. Work individually or in pairs.
2. Create a poster that promotes proper harvesting, packaging, and storage of vegetables.
3. Your poster must include:
4. A clear and catchy slogan related to post-harvest handling
5. Simple drawings or illustrations showing proper practices
6. Practical reminders (e.g., "Wash vegetables using clean water, "Store in cool place")
7. Use clean, organized, and creative layout.
8. Present and explain your poster in front of the class.
9. Be ready to answer questions about your design and message.
10. Your work will be assessed based on creativity, accuracy, and relevance to the topic.

LEARNING ACTIVITY SHEET (LAS)

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Learning Competency:

Perform harvest and post-harvest handling operations

I. Activity No. 1: ASSESSMENT

II. Objective(s): At the end of the activity, you should be able to

- ✓ Explain the importance of proper washing, packaging, labeling, and recording of harvested vegetables.
- ✓ Perform proper post-harvest handling operations using appropriate materials and procedures.
- ✓ Demonstrate responsibility, cleanliness, cooperation, and appreciation in handling harvested vegetables to reduce waste and maintain quality.

III. Materials Needed:

Learning Activity Sheet

IV. Instructions:

Directions: Read each situation carefully. Analyze the problem or practice related to post-harvest handling of vegetables. Choose the letter of the **BEST** answer and write it on a separate sheet of paper

1. After harvesting pechay, Ana washed the vegetables using clean water before packaging them for selling in the market. Why is proper washing important?
 - A. It delays harvesting time.
 - B. It changes the vegetable color.
 - C. It increases vegetable weight.
 - D. It helps remove dirt and contaminants.

2. A farmer packed tomatoes in plastic crates instead of sacks before transporting them to town. Why was this practice appropriate?
 - A. The crates increased the tomato size.
 - B. The crates reduced the harvest quantity.
 - C. The crates made the tomatoes ripen faster.
 - D. The crates protected the tomatoes from bruising.

3. Vegetable packages in a cooperative store included labels showing the product name and harvest date. What is the main purpose of labeling?
 - A. To increase vegetable size
 - B. To improve harvesting speed
 - C. To provide product information
 - D. To prevent vegetables from ripening
4. Mario recorded the number of eggplants harvested every week in a logbook. How does recording help the farmer?
 - A. It removes damaged vegetables.
 - B. It changes the quality of vegetables.
 - C. It helps monitor production and sales.
 - D. It increases the freshness of vegetables.
5. A learner washed harvested vegetables in dirty water collected from a canal. What is the possible effect of this practice?
 - A. The vegetables become larger.
 - B. The vegetables become sweeter.
 - C. The vegetables ripen immediately.
 - D. Vegetables may become contaminated.
6. Before packaging vegetables, a farmer separated damaged vegetables from fresh ones. Why is sorting important?
 - A. It increases harvesting time.
 - B. It reduces vegetable freshness.
 - C. It changes vegetable appearance.
 - D. It helps maintain product quality.
7. Harvested vegetables were stored in a cool and clean area after packaging. What is the benefit of proper storage?
 - A. It increases vegetable size.
 - B. It changes the vegetable color.
 - C. It helps maintain freshness.
 - D. It delays packaging operations.
8. Liza carefully handled tomatoes while washing and packaging them to avoid bruising. Which value did Liza demonstrate?
 - A. Carelessness
 - B. Dependence
 - C. Laziness
 - D. Responsibility
9. Learners cleaned the tables, containers, and tools before handling harvested vegetables. Why should cleanliness be observed during post-harvest operations?
 - A. To speed up harvesting
 - B. To change vegetable taste
 - C. To prevent contamination
10. During a school activity, learners worked together in washing, labeling, and packaging vegetables. What value was shown in the activity?
 - A. Cooperation
 - B. Competition
 - C. Dependence
 - D. Negligence

11. Vegetables packed in damaged baskets were crushed during transportation. What should be done to avoid this problem?
- A. Harvest vegetables earlier.
 - B. Store vegetables outdoors.
 - C. Mix vegetables of different sizes.
 - D. Use proper packaging containers.
12. A farmer removed spoiled vegetables before storing the harvested products. Why was this action necessary?
- A. To change vegetable color
 - B. To increase vegetable weight
 - C. To improve harvesting speed
 - D. To reduce spoilage and waste
13. A learner forgot to record the quantity of vegetables sold in the market. What problem may happen?
- A. Packaging is becoming easier.
 - B. Vegetables become cleaner.
 - C. Vegetable freshness increases.
 - D. Farm monitoring has become difficult.
14. Consumers preferred buying vegetables that were clean, properly packaged, and labeled. Why do consumers choose these products?
- A. They spoil more quickly.
 - B. They are harvested more slowly.
 - C. They appear safe and high quality.
 - D. They are heavier than other products.
15. A farmer practiced proper washing, sorting, packaging, labeling, and recording after harvesting. What is the best result of these practices?
- A. Faster spoilage
 - B. Increased contamination
 - C. Lower vegetable quality
 - D. Reduced post-harvest losses

V. Synthesis

Proper post-harvest handling operations such as washing, sorting, packaging, labeling, and recording are important in maintaining the freshness, cleanliness, and quality of vegetables. Through the activities, learners developed practical skills and demonstrated responsibility, cooperation, and cleanliness in handling harvested products. These practices help reduce waste, prevent spoilage, and ensure better quality vegetables for consumers.