WEEK 1: LESSON 1

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
|  | GRADE 8 | AGRICULTURE AND NUTRITION |  |  |  |

**Strand:** Conservation of Resources

**Sub Strand**: Soil Conservation Measures

**Specific Learning Outcomes**

By the end of the lesson, learners should be able to:

1. Identify the methods of soil conservation in an agricultural environment.

2. Describe the strip cropping method of soil conservation in an agricultural environment.

3. Use digital devices to search for video clips on how to prepare the strip cropping method.

4. Appreciate the strip cropping method as a way of soil conservation.

**Key Inquiry Question:**

- How can we conserve the soil in the environment?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Unity** | **Environmental awareness** |

**Learning Resources:**

- Video clips

- Agriculture Learner's Book

- Pictures

- Lesson notes

**Organisation of Learning:**

**Introduction (5 minutes)**

- Begin by reviewing the previous lesson on agricultural practices and soil importance.

- Guide learners to read selected passages from the Agriculture Learner's Book and discuss relevant content from the learning resources, focusing on the significance of soil conservation.

**Lesson Development (30 minutes)**

- The lesson will be structured into four distinct steps:

**Step 1:** Brainstorming

- In small groups, have students brainstorm their understanding of what soil conservation means. Encourage them to write down their ideas and present them to the class.

**Step 2:** Research on Soil Conservation Methods

- Assign groups or pairs to search for various methods of soil conservation using their digital devices or available print resources. They should create a list of these methods and discuss their findings with the class.

**Step 3:** Focus on Strip Cropping

- Explain the strip cropping method in detail. Discuss the benefits and applications of this method in agriculture. Guide students to think about why this method is effective in conserving soil.

**Step 4:** Watch Demonstration Clips

- Have students use digital devices to search for and watch short video clips demonstrating how to prepare the strip cropping method. After watching, encourage discussion on the steps involved and any new understandings they gained from the videos.

**Conclusion (5 minutes)**

- Summarize key points and review learning objectives achieved during the lesson.

- Conduct a brief interactive quiz or game based on soil conservation methods to reinforce the main topics.

- Prepare learners for the next session by previewing upcoming topics or posing questions for consideration, such as: "What other methods besides strip cropping can we explore?"

**Extended Activities:**

- Soil Conservation Poster Project: Have students create posters highlighting different soil conservation methods, including illustrations and descriptions.

- Field Study: Organize a field trip to a local farm or conservation area that practices soil conservation measures, including strip cropping.

- Research Presentation: Ask students to choose a method of soil conservation and prepare a short presentation for the class, discussing its benefits and implementation.

**Teacher Self-Evaluation:**

WEEK 1: LESSON 2

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
|  | GRADE 8 | AGRICULTURE AND NUTRITION |  |  |  |

**Strand:** Conservation of Resources

**Sub Strand:** Soil Conservation Measures

**Specific Learning Outcomes:**

By the end of the lesson, the learner should be able to:

- Carry out the strip cropping method in the school farm.

- Enjoy carrying out strip cropping as one of the methods of soil conservation.

**Key Inquiry Question:**

- How do you prepare the strip cropping method?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Unity** | **Environmental awareness** |

**Learning Resources:**

- School farm

- Farm tools (e.g., panga, jembe)

- Manure

- Digital devices

**Organisation of Learning**

**Introduction (5 minutes)**

- Review the previous lesson on soil conservation techniques.

- Guide learners to read and discuss relevant content from the learning resources, focusing on strip cropping and its importance in preventing soil erosion.

**Lesson Development (30 minutes)**

**Step 1:** Preparation of Tools (10 minutes)

- In groups, learners will identify and gather the necessary tools for strip cropping, such as the panga and jembe.

- Discuss the role and importance of each tool in the stripping process.

**Step 2:** Selecting and Preparing the Field (10 minutes)

- Each group will choose a section of the school farm to prepare for strip cropping.

- They will clear the area, remove weeds, and apply manure to enrich the soil.

**Step 3:** Establishing Seedlings (5 minutes)

- Groups will select appropriate seedlings to plant in strips.

- Each learner will plant seedlings in their designated strips collaboratively, ensuring they understand proper planting techniques.

**Step 4:** Documentation (5 minutes)

- Using digital devices, groups will record a short video or take photos as they carry out the strip cropping method.

- Encourage learners to explain the steps they are taking in their documentation.

**Conclusion (5 minutes)**

- Summarize the key points of the lesson: the importance of strip cropping as a soil conservation method and the steps involved in its implementation.

- Conduct a brief interactive activity — for example, ask learners to share one key takeaway from the activity.

- Prepare learners for the next session by previewing upcoming topics, such as other soil conservation methods or the impact of soil health on crop yields.

**Extended Activities**

- Soil Health Investigation: Students can investigate which crops grow best in their local environment and how they can apply strip cropping with those crops.

- Field Journal: Encourage each student to maintain a journal documenting their observations on the growth and health of the planted strips over time.

- Class Presentation: Have groups prepare a presentation on the benefits of strip cropping and other soil conservation methods that they will present in the next class.

**Teacher Self-Evaluation:**

WEEK 1: LESSON 3

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
|  | GRADE 8 | AGRICULTURE AND NUTRITION |  |  |  |

**Strand**: Conservation of Resources

**Sub Strand**: Soil Conservation Measures

**Specific Learning Outcomes:**

- By the end of the lesson, students should be able to:

1. Describe grassed waterways as a method of soil conservation in agricultural environments.

2. Use digital devices to search and view clips on the preparation of grassed waterways.

3. Participate in an activity to prepare a grassed waterway in the school farm.

4. Enjoy the hands-on experience of preparing a grassed waterway.

**Key Inquiry Question:**

- How do you prepare a grassed waterway method in a farm?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Unity** | **Environmental awareness** |

**Learning Resources:**

- School farm

- Grass

- Agriculture Learner's book

- Lesson notes

- Digital devices (tablets or computers for research)

**Organization of Learning**

**Introduction** (5 minutes)

- Review the previous lesson on soil conservation fundamentals.

- Encourage students to share what they remember about different soil conservation methods.

- Introduce grassed waterways and their importance in preventing soil erosion.

**Lesson Development** (30 minutes)

**Step 1**: Introduction to Grassed Waterways (10 minutes)

- Explain what grassed waterways are and their role in soil conservation.

- Use visuals or diagrams from the Agriculture Learner's book to illustrate how grassed waterways are designed and function.

- Goal: Students should understand the concept and importance of grassed waterways.

**Step 2**: Research Activity (10 minutes)

- In pairs, students will use digital devices to research grassed waterways.

- Students should find definitions, benefits, and examples of successful implementations.

- Provide guidance and assist students as necessary to navigate reliable sources online.

- Goal: Students will gather information that reinforces their understanding of the subject.

**Step 3**: Watch Informational Clips (5 minutes)

- Have students watch short clips demonstrating how to prepare a grassed waterway.

- Provide selected videos that showcase both the preparation process and the impact on soil conservation.

- Discuss what they observed in the clips as a class.

- Goal: Students will visualize the practical steps involved in preparing a grassed waterway.

**Step 4**: Preparation Activity in School Farm (5 minutes)

- Divide the class into small teams, and explain the task of preparing a simple grassed waterway in the school farm.

- Briefly outline the steps that will be taken during the physical activity, including selecting the location and planting grass.

- Goal: Students will apply their learning hands-on and enjoy the process of conservation.

**Conclusion** (5 minutes)

- Recap the key points discussed during the lesson about grassed waterways and their benefits.

- Engage the class in a quick interactive quiz or discussion to reinforce the main concepts.

- Preview next week’s topics, such as other soil conservation methods, and encourage students to think about questions they might have.

**Extended Activities:**

1. Create a Poster: Students can create a poster that showcases the benefits of grassed waterways and other soil conservation methods. Display these posters around the school.

2. Field Diary: Encourage students to keep a field diary to document the growth of the grass in their prepared waterways and observe changes over time.

3. Community Project: Collaborate with local farms or community gardens to implement grassed waterways, allowing students to apply their learning in real-world scenarios.

**Teacher Self-Evaluation:**

WEEK 1: LESSON 4

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
|  | GRADE 8 | AGRICULTURE AND NUTRITION |  |  |  |

**Strand**: Conservation of Resources

**Sub Strand:** Soil Conservation Measures

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

1. Describe the stone and trash lines as methods of soil conservation in the agricultural environment.

2. Use digital devices to search for clips on how to prepare stone and trash lines.

3. Acknowledge the importance of stone and trash lines as methods of soil conservation.

**Key Inquiry Question:**

- How do stone lines and trash lines conserve soil in the environment?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Unity** | **Environmental awareness** |

Learning Resources:

- Pictures

- Tablets

- Lesson notes

- MTP Agriculture Learner's book

**Organization of Learning**

I**ntroduction** (5 Minutes)

- Begin by reviewing the previous lesson's key points on soil conservation.

- Encourage learners to read and engage with relevant sections of the learner's book, introducing the concept of stone and trash lines.

**Lesson Development** (30 Minutes)

**Step 1**: Understanding Stone and Trash Lines (10 Minutes)

- Display pictures of stone and trash lines in a farming context.

- In groups, learners discuss their observations and take notes on what they see.

- Encourage them to think about the materials used and their placements.

**Step 2**: Group Discussions (10 Minutes)

- In pairs, learners share their insights, focusing on:

- How stone lines help in retaining moisture and preventing erosion.

- How trash lines (made of organic matter) contribute to soil health.

- Ask each group to jot down key points and prepare to present them briefly.

**Step 3**: Research and Digital Exploration (5 Minutes)

- Guide students to use tablets to search for video clips demonstrating how to prepare stone and trash lines.

- Have a few selected clips saved beforehand to facilitate discussion.

**Step 4**: Presentation of Findings (5 Minutes)

- Each group or pair presents their findings, including what they learned from the videos and how they think these methods benefit soil conservation.

- Encourage class input and discussion after each presentation to reinforce learning.

**Conclusion** (5 Minutes)

- Summarize the key points discussed about stone and trash lines, emphasizing their importance in soil conservation.

- Conduct a quick interactive activity, such as a "true or false" quiz, to reinforce the main concepts.

- Preview the next topic related to soil conservation techniques, prompting students with questions to consider over the next lesson.

**Extended Activities:**

1. Create a Visual Project: Learners can create a poster or digital presentation illustrating how to implement stone and trash lines on a farm.

2. Field Survey: If possible, organize a field trip or local survey where students can identify and observe stone and trash lines in their community.

3. Research Assignment: Assign students to write a short report on different soil conservation methods utilized around the world, comparing them with stone and trash lines.

**Teacher Self-Evaluation:**

WEEK 2: LESSON 1

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**Strand**: Conservation of Resources

**Sub Strand:** Soil Conservation Measures

**Specific Learning Outcomes**

- By the end of the lesson, learners should be able to:

- Carry out a practical activity on preparing the stone and trash lines method in the school farm.

- Demonstrate a caring attitude towards soil in the environment.

**Key Inquiry Question**

- How do we construct stone and trash lines in the school farm?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Unity** | **Environmental awareness** |

**Learning Resources**

- Stones

- Leaves or stalks

- School farm

- Digital devices for documentation (camera or smartphone)

**Organisation of Learning**

**Introduction** (5 minutes)

- Review the previous lesson on the importance of soil conservation.

- Engage learners in a discussion about soil conservation methods, notably stone and trash lines, prompting them to consider their benefits.

**Lesson Development** (30 minutes)

**Step 1**: Understanding the Method (7 minutes)

- Explain the concept of stone and trash lines. Discuss why they are beneficial for soil conservation, such as preventing soil erosion and retaining moisture.

- Use visuals or diagrams of stone lines as examples.

**Step 2**: Gathering Materials (8 minutes)

- Organize students into small groups and direct them to the school farm.

- Assign each group to collect stones, leaves, and stalks from designated areas while ensuring they work collaboratively and safely.

**Step 3**: Construction Activity (10 minutes)

- Back at the designated area, instruct each group on how to arrange stones and leaves/stalks to create their stone and trash lines.

- Monitor groups as they work, providing support and ensuring that they understand how to structure the lines properly.

**Step 4**: Documentation (5 minutes)

- Allow groups to use digital devices to take pictures of their constructed stone and trash lines.

- Instruct students to share their images on a class platform or social media (if appropriate) to showcase their work and encourage discussions among peers.

**Conclusion** (5 minutes)

- Summarize the key points discussed throughout the lesson, emphasizing the importance of soil conservation and the specific role of stone and trash lines.

- Conduct a brief interactive activity, such as a quiz or quick discussion, asking students to share what they learned or found interesting.

- Prepare learners for the next session by previewing upcoming topics, possibly focusing on different soil conservation techniques or the effects of soil erosion.

**Extended Activities**

- Encourage students to create a soil conservation project at home, such as starting a vegetable garden using soil conservation practices.

- Organize a poster competition where students illustrate and explain different soil conservation methods, including stone and trash lines.

- Propose a field trip to a local farm or conservation area to observe soil conservation techniques in action.

**Teacher Self-Evaluation:**

WEEK 2: LESSON 2

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
|  | GRADE 8 | AGRICULTURE AND NUTRITION |  |  |  |

**Strand:** Conservation of Resources

**Sub Strand**: Soil Conservation Measures

**Specific Learning Outcomes:**

By the end of the lesson, the learner should be able to:

1. Describe the soil bunds as a method of soil conservation in an agricultural environment.

2. Carry out the soil bunds method of soil conservation in the school farm.

3. Demonstrate a caring attitude towards soil in the environment.

**Key Inquiry Question:**

- How are soil bunds constructed?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Unity** | **Environmental awareness** |

**Learning Resources:**

- School farm

- MTP Agriculture Learner's Book

- Lesson notes

- Digital devices

**Organisation of Learning:**

**Introduction** (5 minutes)

- Begin by reviewing key points from the previous lesson about soil and its importance in agriculture.

- Ask students to share any previous knowledge or experiences they have regarding soil conservation methods.

- Introduce the concept of soil bunds, emphasizing their role in preventing soil erosion and conserving moisture.

**Lesson Development** (30 minutes)

**Step 1**: Research (10 minutes)

- Divide students into pairs or small groups and provide them with digital devices.

- Instruct students to search for video clips or articles about how to prepare soil bunds in agricultural settings.

- Encourage them to take notes and focus on key steps involved in the construction of soil bunds.

**Step 2**: Group Discussion (10 minutes)

- After the research phase, students will discuss their findings within their groups.

- Each group should summarize the process of soil bund construction, the materials needed, and the benefits of using soil bunds.

- Guide students to ensure that everyone has a chance to share their thoughts.

**Step 3**: Practical Application (5 minutes)

- Transition outside to the school farm to implement the learned concept.

- Instruct students on how to construct soil bunds using materials available on the farm.

- Supervise and assist them as they work, emphasizing teamwork and cooperation.

**Step 4**: Reflection (5 minutes)

- Once the soil bunds are constructed, gather students to reflect on the activity.

- Ask questions about what they learned, how they can apply soil conservation methods at home, and the importance of caring for soil.

**Conclusion** (5 minutes)

- Summarize the key points learned about soil bunds and their importance in conserving soil.

- Conduct a quick interactive activity, such as a quiz or a question-and-answer session, to reinforce key concepts.

- Preview the next lesson by posing questions about other soil conservation methods they may want to learn about, such as terraces or cover cropping.

**Extended Activities:**

- Research Project: Assign students to create a poster or presentation about different soil conservation methods, including soil bunds, terraces, and crop rotation, and present it to the class.

- Community Service: Organize a volunteer day where students help maintain the soil bunds on the school farm or in a local community garden, fostering a sense of responsibility towards the environment.

- Journal Reflection: Have students maintain a journal for a week where they note any observations of soil erosion or conservation in their local community or during their travels.

**Teacher Self-Evaluation:**

WEEK 2: LESSON 3

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
|  | GRADE 8 | AGRICULTURE AND NUTRITION |  |  |  |

**Strand**: Conservation of Resources

**Sub Strand**: Soil Conservation Measures (Project)

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

1. Construct a farm model using materials such as cartons, cardboard, soil, and papier mache, demonstrating soil conservation methods.

2. Demonstrate creativity and value each other's efforts in constructing a farm model using locally available materials.

**Key Inquiry Question(s):**

- How do you construct a farm model on soil conservation methods using locally available materials?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Unity** | **Environmental awareness** |

**Learning Resources:**

- Working surface

- Cartons, cardboard, soil, and papier mache

- Digital devices (for research)

**Organisation of Learning:**

**Introduction** (5 minutes):

- Begin with a brief review of the previous lesson on soil conservation.

- Engage learners in a discussion about the importance of soil conservation, prompting them to highlight key concepts from past discussions.

- Introduce the project and explain its relevance.

**Lesson Development** (30 minutes):

**Step 1**: Research (10 minutes)

- Divide students into small groups.

- Each group uses digital devices to search for and gather information on various soil conservation methods (e.g., contour farming, terracing, cover crops).

- Encourage students to note important features and benefits of these methods.

**Step 2**: Planning (5 minutes)

- In their groups, students discuss which soil conservation methods they would like to model in their farm designs.

- Each group should create a simple sketch of their model, indicating where and how they will use their materials.

**Step 3**: Construction (10 minutes)

- Provide time for students to gather the materials (cartons, cardboard, soil, and papier mache) from the classroom or designated areas.

- As groups work collaboratively to create their farm models, circulate around the room to provide support, check for understanding, and encourage creativity.

**Step 4**: Presentation (5 minutes)

- Each group presents their farm model to the class, explaining the soil conservation methods represented in their designs and their importance.

- Focus on celebrating creativity and collaboration.

**Conclusion** (5 minutes):

- Summarize the key points of soil conservation methods discussed and the learning objectives achieved.

- Conduct a brief interactive activity where students can share one new thing they learned from another group’s presentation.

- Preview upcoming topics on sustainable farming practices, prompting students to think about how these practices relate to the soil conservation methods they modeled.

**Extended Activities:**

- Research Paper: Have students write a short paper on one specific soil conservation method, detailing its practices, benefits, and how it is applied in real life.

- Field Visit: Organize a visit to a local farm that implements soil conservation techniques, allowing students to observe real-world applications.

- Creative Storytelling: Encourage students to write a short story about a farmer who successfully uses various soil conservation methods to improve their farm’s health and productivity.

**Teacher Self-Evaluation:**

WEEK 2: LESSON 4

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
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**Strand**: Conservation of Resources

**Sub Strand**: Soil Conservation Measures (Project)

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

1. Construct a farm model using materials such as cartons, cardboard, soil, and papier mache, demonstrating soil conservation methods.

2. Demonstrate creativity and value each other's efforts in constructing a farm model using locally available materials.

**Key Inquiry Question(s):**

- How do you construct a farm model on soil conservation methods using locally available materials?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Unity** | **Environmental awareness** |

**Learning Resources:**

- Working surface

- Cartons, cardboard, soil, and papier mache

- Digital devices (for research)

**Organisation of Learning:**

**Introduction** (5 minutes):

- Begin with a brief review of the previous lesson on soil conservation.

- Engage learners in a discussion about the importance of soil conservation, prompting them to highlight key concepts from past discussions.

- Introduce the project and explain its relevance.

**Lesson Development** (30 minutes):

**Step 1**: Research (10 minutes)

- Divide students into small groups.

- Each group uses digital devices to search for and gather information on various soil conservation methods (e.g., contour farming, terracing, cover crops).

- Encourage students to note important features and benefits of these methods.

**Step 2**: Planning (5 minutes)

- In their groups, students discuss which soil conservation methods they would like to model in their farm designs.

- Each group should create a simple sketch of their model, indicating where and how they will use their materials.

**Step 3**: Construction (10 minutes)

- Provide time for students to gather the materials (cartons, cardboard, soil, and papier mache) from the classroom or designated areas.

- As groups work collaboratively to create their farm models, circulate around the room to provide support, check for understanding, and encourage creativity.

**Step 4**: Presentation (5 minutes)

- Each group presents their farm model to the class, explaining the soil conservation methods represented in their designs and their importance.

- Focus on celebrating creativity and collaboration.

**Conclusion** (5 minutes):

- Summarize the key points of soil conservation methods discussed and the learning objectives achieved.

- Conduct a brief interactive activity where students can share one new thing they learned from another group’s presentation.

- Preview upcoming topics on sustainable farming practices, prompting students to think about how these practices relate to the soil conservation methods they modeled.

**Extended Activities:**

- Research Paper: Have students write a short paper on one specific soil conservation method, detailing its practices, benefits, and how it is applied in real life.

- Field Visit: Organize a visit to a local farm that implements soil conservation techniques, allowing students to observe real-world applications.

- Creative Storytelling: Encourage students to write a short story about a farmer who successfully uses various soil conservation methods to improve their farm’s health and productivity.

**Teacher Self-Evaluation:**

WEEK 3: LESSON 1

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
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**Strand:** Conservation of Resources

**Sub Strand**: Water Harvesting and Storage

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

1. Define the term water harvesting as a method of conserving resources.

2. Identify the various methods of harvesting water in the environment.

3. Use digital devices to search for information on how water can be harvested.

4. Acknowledge the importance of harvesting water in the environment.

**Key Inquiry Question(s):**

- How do we harvest water in the locality?

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| **Core competencies** | **Values** | **PCIs** |
| * **Critical thinking and problem solving** | * **Responsibility** | **Environmental conservation** |

**Learning Resources:**

- MTP Agriculture Learner's book

- Lesson notes

- Digital devices (tablets, laptops, or smartphones)

- Pictures related to water harvesting methods

**Organisation of Learning**

**Introduction** (5 minutes):

- Begin with a brief review of the previous lesson focused on conservation practices.

- Ask students to share any examples of conservation techniques they discussed last time.

- Introduce the topic of water harvesting by defining it and why it’s vital for resource conservation.

**Lesson Development** (30 minutes):

**Step 1**: Group Brainstorming (10 minutes)

- Organize students into small groups.

- Each group discusses and presents their understanding of "water harvesting." Prompt them with questions like “What do you think it means?” and “Why do we need to harvest water?”

- Groups present their ideas to the class, and a collective definition is formed.

**Step 2**: Picture Analysis (10 minutes)

- Show students images related to water harvesting methods (e.g., rainwater barrels, swales, and terracing).

- In pairs, have students analyze the pictures and discuss what they see and how it demonstrates water harvesting.

- Ask pairs to share their observations with the class.

**Step 3**: Digital Research (5 minutes)

- Assign digital devices to groups.

- Instruct them to search for specific methods of water harvesting, focusing on local practices (e.g., constructing rainwater catchment systems, using clay pots).

- Groups present the methods they found on their devices, highlighting the features and benefits of each method.

**Step 4:** Class Discussion (5 minutes)

- As a whole class, discuss the findings from the digital research.

- Emphasize the importance of water harvesting in combating water scarcity and promoting sustainability.

- Encourage students to think critically about which methods could be beneficial in their local context.

**Conclusion** (5 minutes):

- Summarize the key points discussed: the definition of water harvesting, various methods identified, and the importance of harvesting water for conservation.

- Conduct a short interactive quiz or game to reinforce the key concepts.

- Preview the next session by raising questions like, “What are the challenges in implementing water harvesting methods in our community?”

**Extended Activities:**

1. Water Harvesting Project: Have students design their own water harvesting system using materials found at home or in the classroom. Students can create a model or a detailed drawing explaining their system.

2. Research Assignment: Assign students to further investigate water harvesting methods in different parts of the world and report their findings. They could create a presentation or infographic to share with the class.

3. Field Trip Planning: If possible, organize a field trip to a local water harvesting site or conservation center, allowing students to see real-world applications of their learning.

**Teacher Self-Evaluation:**

WEEK 3: LESSON 2

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
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**Strand**: Conservation of Resources

**Sub Strand**: Water Harvesting and Storage

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

- Identify the ways of storing harvested water for domestic use.

- Discuss these methods in class.

- Use digital devices to search for information and clips about water storage methods.

- Appreciate the various ways of storing harvested water in the environment.

**Key Inquiry Question(s):**

- How do we store the harvested water from the environment?

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| **Core competencies** | **Values** | **PCIs** |
| * **Critical thinking and problem solving** | * **Responsibility** | **Environmental conservation** |

**Learning Resources:**

- Pictures (related to water storage methods)

- Lesson notes

- Digital devices (tablets/computers)

- MTP Agriculture Learner's Book

**Organisation of Learning:**

**Introduction** (5 minutes)

- Review the previous lesson about water conservation.

- Guide learners to read select sections from the lesson notes and discuss key concepts related to water storage, helping them connect ideas from prior knowledge.

**Lesson Development** (30 minutes)

- **Step 1**: Group Brainstorming (10 minutes)

- Divide learners into small groups.

- Each group brainstorms and lists various methods they know for storing harvested water within their locality.

- Encourage sharing of local practices and experiences.

- **Step 2**: Research Activity (10 minutes)

- Learners use digital devices to search for new information.

- They can look for clips on how harvested water is stored using shallow water pans, water ponds, and various types of containers like barrels and tanks.

- Each group compiles their findings to share with the class.

- **Step 3**: Group Presentations (5 minutes)

- Each group presents their findings on different methods of storing harvested water.

- Encourage other students to ask questions and engage in discussions after each presentation.

- **Step 4**: Class Discussion (5 minutes)

- Lead a class discussion on the various methods presented.

- Discuss the benefits and potential drawbacks of each method, promoting critical thinking about water conservation.

**Conclusion** (5 minutes)

- Summarize the key points learned about storing harvested water.

- Ask students to reflect on which methods they found most interesting and why.

- Conduct a brief interactive activity, such as a quiz or a group reflection, to reinforce the topic.

- Prepare learners for the next session, hinting at upcoming topics related to water quality and sanitation.

**Extended Activities:**

- Encourage students to create a poster or digital presentation about a specific water storage method discussed in class, including its benefits and drawbacks. Display these projects in the classroom.

- Suggest students conduct a home survey on water storage methods used by their families and report back their findings in the next lesson.

- Organize a field trip to a local site where water harvesting and storage methods are in practice, if feasible, to bring real-world context to their learning.

**Teacher Self-Evaluation:**

WEEK 3: LESSON 3

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
|  | GRADE 8 | AGRICULTURE AND NUTRITION |  |  |  |

**Strand**: Conservation of Resources

**Sub Strand**: Water Harvesting and Storage

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

1. State the domestic uses of the harvested water from the environment.

2. Discuss the domestic uses of the harvested water from the environment.

3. Prepare posters showing the domestic uses of harvested water from the environment.

4. Acknowledge the domestic uses of the harvested and stored water in the environment.

**Key Inquiry Questions:**

- What are the domestic uses of the harvested and stored water?

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| **Core competencies** | **Values** | **PCIs** |
| * **Critical thinking and problem solving** | * **Responsibility** | **Environmental conservation** |

**Learning Resources:**

- Posters

- Manillas

- Marker pens

- Lesson notes

- MTP Agriculture Learner's Book

**Organisation of Learning:**

**Introduction** (5 minutes)

1. Begin by reviewing the previous lesson, reinforcing the importance of water in agriculture and household use.

2. Guide learners to read relevant content from the MTP Agriculture Learner's Book to refresh their knowledge and to discuss what they learned about water harvesting in a broader context.

**Lesson Development** (30 minutes)

**Step 1**: Brainstorming (10 minutes)

- In small groups, have learners brainstorm a list of domestic uses for harvested water. Encourage them to think creatively, considering uses inside and outside the home (e.g., drinking, cooking, irrigation, cleaning, etc.).

**Step 2**: Group Discussion (10 minutes)

- Each group will present their brainstormed ideas to the class. Facilitate a class discussion where learners can compare and elaborate on each group's contributions and correct any misconceptions.

**Step 3**: Poster Preparation (5 minutes)

- Groups will select a few key domestic uses of harvested water to illustrate. Provide each group with posters and marker pens to create visual representations of their selected uses.

**Step 4**: Display and Share (5 minutes)

- Once the posters are completed, have each group present their poster to the class, explaining the domestic uses they chose to highlight. Encourage questions from peers to engage them in the topic.

**Conclusion** (5 minutes)

- Summarize the key points discussed during the lesson, re-emphasizing the importance of understanding the domestic uses of harvested and stored water.

- Conduct a brief interactive activity where learners can share one new thing they learned, ensuring participation from all groups.

- Prepare students for the next session by previewing upcoming topics, such as conservation techniques for other natural resources.

**Extended Activities:**

- Research Project: Assign students to research and present on a specific domestic use of harvested water not covered in class (e.g., water for livestock).

- Community Connection: Encourage students to survey their families about how they use harvested water and report back with their findings.

- Practical Application: Organize a field trip to a local water harvesting site or invite a guest speaker who uses harvested water at home or in farming.

**Teacher Self-Evaluation**:

WEEK 3: LESSON 4

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**Strand**: Conservation of Resources

**Sub Strand**: Water Harvesting and Storage

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

- Initiate measures of their choice towards water harvesting and storage in the environment.

- Make class presentations on their possible initiative measures for harvesting and storing rainwater and surface runoff in the school environment.

- Show responsibility in harvesting and storing water for domestic use.

**Key Inquiry Question:**

- Which initiative measures can you put in place to harvest and collect rainwater and surface runoff in the school environment?

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| **Core competencies** | **Values** | **PCIs** |
| * **Critical thinking and problem solving** | * **Responsibility** | **Environmental conservation** |

**Learning Resources:**

- Digital devices (tablets/laptops for research and presentations).

- Access to the school environment for practical observation and data gathering.

**Organisation of Learning:**

**Introduction** (5 minutes):

- Review the previous lesson on the importance of conserving water and natural resources.

- Guide learners to read and discuss relevant content from digital resources or handouts, focusing on the concepts of water harvesting and storage.

**Lesson Development** (30 minutes):

**Step 1**: Observation and Collaboration (10 minutes)

- Divide the class into small groups and assign each group a specific area of the school grounds to observe.

- Instruct groups to identify existing water runoff areas and potential sites for rainwater harvesting (like rooftops, garden beds, etc.).

**Step 2**: Planning Initiatives (10 minutes)

- Groups will brainstorm potential measures they can take to enhance water harvesting and storage in their observed areas.

- Encourage creativity and practicality. Each group should outline their ideas on paper or digital devices, focusing on how to implement and maintain their proposals.

**Step 3**: Presentation Preparation (5 minutes)

- Groups will prepare a short presentation (3-5 minutes) on their proposed initiatives.

- Encourage them to incorporate visuals or diagrams if they can, to enhance their presentations.

**Step 4**: Class Presentations (5 minutes)

- Each group will present their proposals to the class.

- Allow time for questions and constructive feedback from peers after each presentation.

**Conclusion** (5 minutes):

- Summarize the key points discussed, emphasizing the importance of water conservation and practical initiatives for harvesting water.

- Conduct a brief interactive quiz (e.g., Kahoot or hand-raising quiz) to reinforce main topics.

- Prepare learners for the next session by providing a preview of upcoming topics on sustainable agriculture practices.

**Extended Activities:**

- Research Project: Learners can research different methods of rainwater harvesting used in various countries. They should prepare a short report or presentation on the method, its effectiveness, and local applicability.

- Water Audit: Have learners conduct a water audit at home or in the school to identify how much water is used daily and areas where they can improve conservation efforts. They can present their findings in the next class.

**Teacher Self-Evaluation:**

WEEK 4: LESSON 1

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**Strand**: Food Production Processes

**Sub Strand**: Kitchen and Backyard Gardening

**Specific Learning Outcomes:**

By the end of the lesson, the learner should be able to:

1. State the roles of kitchen and backyard gardens in food production.

2. Use digital devices to search for information on the roles of kitchen and backyard gardening in food production.

3. Acknowledge the need for kitchen and backyard gardens in food production.

**Key Inquiry Question:**

- What is the role of kitchen and backyard gardens in food production?

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| **Core competencies** | **Values** | **PCIs** |
| * **Critical thinking and problem solving** | * **Unity** | **Poverty eradication** |

**Learning Resources:**

- Lesson notes

- Digital devices

- MTP Agriculture Learner's book

- Posters

- Manillas and market pens

**Organisation of Learning**

**Introduction** (5 minutes)

- Begin with a brief review of the previous lesson. Ask students to share what they remember about food production processes.

- Introduce the topic of kitchen and backyard gardening and guide learners in reading and discussing relevant content from the lesson notes and digital resources, emphasizing key concepts.

**Lesson Development** (30 minutes)

**Step 1**: Brainstorming (10 minutes)

- Divide students into small groups.

- Each group will brainstorm and define what kitchen and backyard gardens are. They should write their definitions on manillas.

- Groups will then present their definitions to the class.

**Step 2**: Outlining Roles (10 minutes)

- In their same groups, students will outline the roles of kitchen and backyard gardens in food production.

- Groups will discuss the various benefits, such as food security, sustainability, and education about where food comes from.

**Step 3**: Digital Research (5 minutes)

- Instruct groups to use digital devices to search for information online regarding the roles and benefits of kitchen and backyard gardens.

- Encourage them to focus on reputable sources and take notes on any new information they find.

**Step 4**: Poster Preparation (5 minutes)

- Each group will create a poster that visually represents the roles of kitchen and backyard gardens in food production.

- They can use images, keywords, and simple graphics to communicate their findings effectively.

**Conclusion** (5 minutes)

- Summarize the key points discussed during the lesson and highlight the learning objectives achieved, reinforcing how kitchen and backyard gardens contribute to food production.

- Conduct a brief interactive activity, such as a quick “turn and talk,” where students discuss with a partner something new they learned about kitchen gardening.

- Preview the next session by posing questions such as, “What plants can we grow in our own backyard gardens?” to encourage thinking ahead.

**Extended Activities**

1. Garden Planning Project: Students can plan a simple garden layout, including what plants to grow and when to plant them based on growing seasons. They can present their plans in the next class.

2. Family Gardening Survey: Each student can survey their family members about kitchen gardens, documenting different gardening experiences, practices, and knowledge about food production.

3. Virtual Garden Tour: Create a virtual tour where students research and showcase different types of kitchen gardens from around the world, presenting how different climates and cultures influence gardening.

**Teacher Self-Evaluation:**

WEEK 4: LESSON 2

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**Strand**: Food Production Processes

**Sub Strand**: Kitchen and Backyard Gardening

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

1. Identify innovative technologies for kitchen and backyard gardens.

2. Use digital devices to search for information on innovative technologies for kitchen and backyard gardens.

3. Appreciate the innovative technologies for kitchen and backyard gardens.

**Key Inquiry Question:**

What are some of the innovative kitchen and backyard gardens used in the modern day world?

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| **Core competencies** | **Values** | **PCIs** |
| * **Critical thinking and problem solving** | * **Unity** | **Poverty eradication** |

**Learning Resources:**

- Digital devices (tablets, computers)

- MTP Agriculture Learner's Book

- Pictures of innovative gardening technologies

- Video clips demonstrating these technologies

- Lesson notes

**Organisation of Learning:**

**Introduction** (5 minutes)

- Briefly review the content covered in the previous lesson (focus on basic gardening practices).

- Facilitate a discussion where learners can share their prior knowledge of kitchen and backyard gardening and express any ideas they already have about using technology in gardening.

**Lesson Development** (30 minutes)

**Step 1**: Brainstorming (10 minutes)

- In small groups, learners will brainstorm various innovative technologies used in kitchen and backyard gardens (e.g., hydroponics, vertical gardens, smart irrigation systems).

- Encourage each group to jot down their ideas on paper or a digital device.

**Step 2**: Research and Exploration (10 minutes)

- Using digital devices, learners will research specific innovative technologies they brainstormed, focusing on how they work and their benefits.

- Learners will find at least two pictures or video clips demonstrating these technologies.

**Step 3**: Class Discussion (5 minutes)

- Each group will present their findings, including the technology they researched, how it works, and the advantages of using it in gardening.

- Facilitate a discussion where students can ask questions or add to each other's presentations.

**Step 4**: Reflection (5 minutes)

- Guide students to pair up and discuss what they learned and how they might apply these innovative technologies to their own gardens at home.

- Encourage them to think about any potential challenges they might face when trying to use these technologies.

**Conclusion** (5 minutes)

- Summarize the key points discussed, focusing on the innovative technologies identified.

- Conduct a quick interactive quiz (e.g., Kahoot or a hands-up response) to reinforce the main topics discussed.

- Preview the next session topics: Sustainable Practices in Gardening and how they relate to innovative technologies.

**Extended Activities:**

- Assign students to create a simple plan for a kitchen or backyard garden that incorporates at least one of the innovative technologies discussed in class. They should outline how they would set it up and maintain it.

- Invite students to write a short paragraph on the potential impact of these technologies on food production in urban areas.

**Teacher Self-Evaluation:**

WEEK 4: LESSON 3

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**Strand**: Food Production Processes

**Sub Strand**: Kitchen and Backyard Gardening

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

- State the benefits of innovative kitchen gardens in food production.

- Use digital devices to search for information on the benefits of innovative kitchen gardens.

- Appreciate the use of innovative kitchen gardens in food production.

**Key Inquiry Question(s):**

- What are the benefits of innovative kitchen gardens?

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| **Core competencies** | **Values** | **PCIs** |
| * **Critical thinking and problem solving** | * **Unity** | **Poverty eradication** |

**Learning Resources:**

- Lesson notes

- Digital devices (tablets/laptops/smartphones)

**Organisation of Learning:**

**Introduction** (5 minutes)

- Review the previous lesson on the importance of agriculture.

- Guide learners to read pertinent content from lesson notes, focusing on kitchen gardening concepts. Encourage discussion to assess understanding.

**Lesson Development** (30 minutes)

- **Step 1**: Brainstorming (10 minutes)

- Divide the class into small groups. Each group will brainstorm ideas about the benefits of innovative kitchen gardens. Prompt them with questions: What do they think innovative kitchen gardens can provide? What benefits can they think of?

- **Step 2**: Research (10 minutes)

- Using digital devices, each group will search for information online about the benefits of innovative kitchen gardens. They should find at least three to five benefits and write them down, ensuring they check multiple reliable sources.

- **Step 3**: Discussion (5 minutes)

- After researching, groups will discuss their findings. They should compare and contrast what they found and prepare to share specific examples of the benefits they've discovered.

- **Step 4**: Presentation (5 minutes)

- Each group will present their findings to the class. Encourage each group to explain why they think each benefit is important for food production in innovative kitchen gardens.

**Conclusion** (5 minutes)

- Summarize the key points discussed: benefits of innovative kitchen gardens, the role of technology in research, and the importance of food production.

- Conduct a quick interactive quiz using questions about the benefits of kitchen gardens to reinforce the main topics.

- Preview the next lesson, hinting at exploring sustainable practices in gardening.

**Extended Activities:**

- Activity 1: Create a mini kitchen garden plan. Learners should design a layout for an innovative kitchen garden in a small space (like a balcony or backyard) and explain what plants they would include and why.

- Activity 2: Conduct interviews with family or community members about their experiences with kitchen gardening. Students can then present these interviews in the next class.

- Activity 3: Start a class blog or digital portfolio where students share their findings and progress in kitchen gardening over the term, documenting plant growth, challenges faced, and lessons learned.

**Teacher Self-Evaluation:**

WEEK 4: LESSON 4

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**Strand**: Food Production Processes

**Sub Strand**: Kitchen and Backyard Gardening

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

1. Identify the factors to consider when establishing a kitchen and backyard garden.

2. Use digital devices to search for information on the factors to consider when establishing a kitchen and backyard garden.

3. Acknowledge the factors to consider before establishing a kitchen and backyard garden for food production.

**Key Inquiry Question:**

- What should one consider before establishing a kitchen garden?

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| **Core competencies** | **Values** | **PCIs** |
| * **Critical thinking and problem solving** | * **Unity** | **Poverty eradication** |

**Learning Resources:**

- Digital devices (tablets, laptops)

- Lesson notes

- Articles and videos on kitchen gardening

**Organisation of Learning**

**Introduction** (5 minutes)

- Review the previous lesson on the importance of gardening and its impact on food security.

- Guide learners to read and discuss a brief overview on the factors influencing garden establishment from the lesson notes. Clarify any misconceptions and set the stage for today’s focus.

**Lesson Development** (30 minutes)

**Step 1**: Brainstorming (5 minutes)

- Divide learners into small groups (4-5 students each).

- Ask each group to brainstorm and write down what they think are important factors to consider when starting a garden (e.g., location, soil quality, plant types, climate).

- After 5 minutes, each group shares their ideas with the class.

**Step 2**: Researching (10 minutes)

- In the same groups, learners will use digital devices to research specific information regarding factors important for kitchen and backyard gardens.

- Each group should focus on two key areas: environmental factors (like sunlight and water) and logistical factors (like space and type of plants).

- Encourage the use of reliable online resources, such as agricultural websites and gardening forums.

**Step 3**: Discussion (10 minutes)

- After the research phase, groups will discuss the findings and agree on a prioritized list of factors to consider when establishing their gardens.

- Each group prepares a short presentation (2 minutes) to share their findings with the class.

**Step 4**: Presentation (5 minutes)

- Groups will present their findings. Encourage a class discussion after each presentation. Ask follow-up questions to deepen understanding, such as “Why is water so vital for a garden?” or “How does soil type affect plant growth?”

**Conclusion** (5 minutes)

- Summarize the key points discussed, highlighting the main factors to consider when starting a kitchen and backyard garden.

- Conduct a quick interactive activity: ask each student to mention one new thing they learned today about kitchen gardening.

- Preview the next class by introducing the topic of different types of herbs and vegetables suitable for kitchen gardens. Pose the question: “What herbs or vegetables do you think are easiest to grow in a home garden?”

**Extended Activities:**

- Have students plan a small kitchen garden at home or in school. They can create a sketch of their garden layout, selecting plants based on what they researched in class.

- Encourage students to keep a journal documenting the growth of their garden, noting factors such as weather, watering schedules, and plant health.

- Organize a class project where each group can choose a plant to grow and present on its requirements and care.

**Teacher Self-Evaluation:**

WEEK 5: LESSON 1

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**Strand**: Food Production Processes

**Sub Strand**: Kitchen and Backyard Gardening

**Specific Learning Outcomes:**

By the end of the lesson, students should be able to:

- Establish a kitchen and backyard garden for food production in the school.

- Take care of the crops established in the kitchen and backyard garden.

- Use the kitchen and backyard garden effectively for food production.

**Key Inquiry Question(s):**

- What types of crops can you establish in a kitchen and backyard garden?

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| **Core competencies** | **Values** | **PCIs** |
| * **Critical thinking and problem solving** | * **Unity** | **Poverty eradication** |

**Learning Resources:**

- Digital devices (for research and presentations)

- School farm

- Crops (e.g., vegetables, cabbages, onions)

**Organisation of Learning:**

**Introduction** (5 minutes)

- Review the previous lesson by asking students to recall the importance of gardening in food production.

- Guide learners to read and discuss relevant content from the learning resources, focusing on key concepts like types of crops and gardening techniques.

Lesson Development (30 minutes)

**Step 1**: Group Formation and Planning (10 minutes)

- Divide the class into small groups of 4-5 students.

- Each group brainstorms and lists different types of crops suitable for a kitchen or backyard garden.

- Encourage them to consider factors like space, sunlight, and climate.

**Step 2**: Garden Design (5 minutes)

- Groups sketch a simple design of their proposed garden layout on paper or digital devices.

- They should include placement of different crops and discuss how to maximize space effectively.

**Step 3**: Planting Preparation (10 minutes)

- Have each group gather materials needed for planting (seeds, soil, gardening tools).

- Discuss the importance of soil quality and preparation, and how to check if it is suitable for planting.

**Step 4**: Planting and Responsibilities (5 minutes)

- Groups plant their chosen seeds in designated areas of the school garden.

- Each group decides on the specific roles for maintenance, such as watering, weeding, and monitoring growth.

**Conclusion** (5 minutes)

- Summarize the key points discussed during the lesson: types of crops, garden planning, and responsibilities.

- Conduct a brief interactive quiz or discussion, asking students to share what they find most interesting about the gardening process.

- Prepare students for the next session by previewing topics related to sustainable gardening practices or the impact of gardening on nutrition.

**Extended Activities:**

- Home Garden Project: Encourage students to start a small garden at home, documenting their progress with photos and a daily journal to share in class.

- Research Assignment: Students can research one specific crop, learning about its growth cycle, care requirements, and nutritional benefits, then present their findings to the class.

- Field Trip: Plan a visit to a local farm or community garden to observe larger-scale food production techniques and sustainable practices in action.

**Teacher Self-Evaluation:**

WEEK 5: LESSON 2

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|  | GRADE 8 | AGRICULTURE AND NUTRITION |  |  |  |

**Strand**: Food Production Processes

**Sub Strand**: Kitchen and Backyard Gardening

**Specific Learning Outcomes:**

By the end of the lesson, students should be able to:

- Establish a kitchen and backyard garden for food production in the school.

- Take care of the crops established in the kitchen and backyard garden.

- Use the kitchen and backyard garden effectively for food production.

**Key Inquiry Question(s):**

- What types of crops can you establish in a kitchen and backyard garden?

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| **Core competencies** | **Values** | **PCIs** |
| * **Critical thinking and problem solving** | * **Unity** | **Poverty eradication** |

**Learning Resources:**

- Digital devices (for research and presentations)

- School farm

- Crops (e.g., vegetables, cabbages, onions)

**Organisation of Learning:**

**Introduction** (5 minutes)

- Review the previous lesson by asking students to recall the importance of gardening in food production.

- Guide learners to read and discuss relevant content from the learning resources, focusing on key concepts like types of crops and gardening techniques.

Lesson Development (30 minutes)

**Step 1**: Group Formation and Planning (10 minutes)

- Divide the class into small groups of 4-5 students.

- Each group brainstorms and lists different types of crops suitable for a kitchen or backyard garden.

- Encourage them to consider factors like space, sunlight, and climate.

**Step 2**: Garden Design (5 minutes)

- Groups sketch a simple design of their proposed garden layout on paper or digital devices.

- They should include placement of different crops and discuss how to maximize space effectively.

**Step 3**: Planting Preparation (10 minutes)

- Have each group gather materials needed for planting (seeds, soil, gardening tools).

- Discuss the importance of soil quality and preparation, and how to check if it is suitable for planting.

**Step 4**: Planting and Responsibilities (5 minutes)

- Groups plant their chosen seeds in designated areas of the school garden.

- Each group decides on the specific roles for maintenance, such as watering, weeding, and monitoring growth.

**Conclusion** (5 minutes)

- Summarize the key points discussed during the lesson: types of crops, garden planning, and responsibilities.

- Conduct a brief interactive quiz or discussion, asking students to share what they find most interesting about the gardening process.

- Prepare students for the next session by previewing topics related to sustainable gardening practices or the impact of gardening on nutrition.

**Extended Activities:**

- Home Garden Project: Encourage students to start a small garden at home, documenting their progress with photos and a daily journal to share in class.

- Research Assignment: Students can research one specific crop, learning about its growth cycle, care requirements, and nutritional benefits, then present their findings to the class.

- Field Trip: Plan a visit to a local farm or community garden to observe larger-scale food production techniques and sustainable practices in action.

**Teacher Self-Evaluation:**

WEEK 5: LESSON 3

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**Strand**: Food Production Processes

**Sub Strand**: Poultry Rearing in a Fold

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

1. Define the terms "Fold" and "Poultry rearing."

2. Identify materials used in the construction of a fold.

3. Describe the structural appearance of a fold in poultry rearing.

4. Acknowledge the importance of a fold in rearing poultry.

**Key Inquiry Questions:**

1. How can we rear poultry in a fold for food production?

2. What is a fold in poultry rearing?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Responsibility** | **Financial literacy** |

**Learning Resources:**

- Digital devices (e.g., tablets, computers)

- Images or photos of poultry folds

- Lesson notes (handouts)

- MTP Agriculture Learner's Book

**Organisation of Learning:**

**Introduction** (5 minutes)

- Begin the lesson by reviewing the previous lesson on food production, focusing on the significance of animal husbandry.

- Ask students to share ideas related to how different animal housing impacts their well-being and productivity.

- Guide learners to read and discuss relevant content from the learning resources on folds and poultry rearing to establish foundational knowledge.

**Lesson Development** (30 minutes)

**Step 1**: Defining Terms (10 minutes)

- Activity: In groups, learners will brainstorm the definitions of “Poultry rearing” and “Fold.” Each group will write down their definition on a chart paper.

- Discussion: Groups will share their definitions, and the teacher will provide clarifications to ensure understanding.

**Step 2**: Observing Poultry Folds (10 minutes)

- Activity: Learners will utilize digital devices to search for video clips or images of poultry folds.

- Discussion: Each group will discuss their findings and share their observations about how poultry folds are structured, focusing on different designs and layouts.

**Step 3**: Identifying Construction Materials (5 minutes)

- Activity: Groups will list materials commonly used for constructing a poultry fold using notes from their research and the lesson handouts.

- Discussion: Each group will present their lists and explain the role of each material in the structure’s safety and functionality.

**Step 4**: Importance of the Fold (5 minutes)

- Activity: As a whole class, discuss the importance of using a fold for poultry rearing. What impact does it have on the chickens' health and productivity?

- Wrap Up: Summarize the importance identified by students and emphasize key benefits like protection from predators, provision of shelter, and facilitation of feeding.

**Conclusion** (5 minutes)

- Summarize the key points from the lesson, including definitions, materials used, structural descriptions, and the importance of a poultry fold.

- Conduct a brief interactive activity, like a quick quiz with questions about the fold and poultry rearing, to reinforce the main topics.

- Prepare learners for the next session by previewing upcoming topics, such as advanced poultry care practices.

**Extended Activities:**

- Activity 1: Create a model of a poultry fold using recycled materials, which could be presented in the next class.

- Activity 2: Conduct a research project on various poultry rearing methods (e.g., free-range vs. enclosed) and their pros and cons, to be shared in a future class discussion.

- Activity 3: Write a short essay on how the design of a poultry fold can impact the health and productivity of chickens.

**Teacher Self-Evaluation:**

WEEK 5: LESSON 4

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**Strand**: Food Production Processes

**Sub Strand**: Poultry Rearing in a Fold

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

1. Identify the rearing practices of poultry in a fold.

2. Explain the rearing practices of poultry in a fold.

3. Acknowledge the importance of these practices.

**Key Inquiry Question:**

- What are the rearing practices of poultry in folds?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Responsibility** | **Financial literacy** |

**Learning Resources:**

- Digital devices, including tablets or laptops

- Video clips related to poultry rearing

- Resource person (poultry farmer or expert)

- Lesson notes and handouts

**Organisation of Learning**

**Introduction** (5 minutes)

- Begin with a brief recap of the previous lesson on animal husbandry or poultry basics.

- Present the key inquiry question to the class: \*“What are the rearing practices of poultry in folds?”\*

- Guide learners to read sections of the lesson notes and discuss video clips that highlight specific rearing practices.

**Lesson Development** (30 minutes)

**Step 1**: Group Formation (5 minutes)

- Divide the class into small groups of 4-5 students.

- Provide each group with digital devices to research information on poultry rearing practices in folds.

**Step 2**: Information Sharing (10 minutes)

- Allow groups to share their findings with each other.

- Encourage students to highlight differences and similarities in the practices they discover.

**Step 3**: Interview Process (10 minutes)

- Introduce the resource person to the class (if available).

- Guide students to prepare and ask questions about the rearing practices they studied and get insights directly from the expert.

**Step 4**: Group Discussion (5 minutes)

- With the gathered information, each group discusses what they've learned.

- Each group will note down key points about rearing practices in folds, focusing on aspects like feeding, shelter, breeding, and health management.

**Conclusion** (5 minutes)

- Summarize the key points covered during the lesson: the identification, explanation, and acknowledgment of poultry rearing practices in folds.

- Conduct a brief interactive quiz or game to reinforce the main topics (e.g., a quick “true or false” session).

- Prepare students for the next session by previewing upcoming topics such as poultry health management.

**Extended Activities:**

1. Poultry Farm Visit: Organize a field trip to a local poultry farm where learners can observe practices in person.

2. Research Project: Assign students to research a specific aspect of poultry rearing (e.g., feeding strategies or disease prevention) and present their findings to the class.

3. Create a Pamphlet: Have students design a pamphlet that explains the key rearing practices of poultry in folds, which they can share with their families or in the community.

**Teacher Self-Evaluation:**

WEEK 6: LESSON 1

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
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**Strand**: Food Production Processes

**Sub Strand**: Poultry Rearing in a Fold

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

1. Identify the factors to consider when constructing a poultry fold.

2. Use digital devices to search for information on factors to consider when constructing a poultry fold.

3. Acknowledge the factors to consider when constructing a poultry fold.

**Key Inquiry Question(s):**

- What should you consider when constructing a poultry fold?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Responsibility** | **Financial literacy** |

**Learning Resources:**

- Digital devices (tablets/computers)

- Resource person (guest speaker or expert in poultry rearing)

- Lesson notes

**Organisation of Learning**

**Introduction** (5 minutes):

- Review the previous lesson on poultry types and their basic needs.

- Ask students to share what they remember about the care and housing of poultry.

- Briefly guide learners to read and discuss content from the lesson notes, emphasizing construction aspects of poultry folds.

**Lesson Development** (30 minutes):

**Step 1**: Brainstorming Session (10 minutes)

- In small groups, learners will brainstorm ideas about what factors need to be considered when constructing a poultry fold.

- Each group will write down their ideas on a flip chart.

**Step 2**: Research Activity (10 minutes)

- Using digital devices, each group will search the internet for additional factors that might affect poultry fold construction, such as location, materials, and design.

- Alternatively, students may have the option to interview a resource person for insights.

**Step 3**: Group Discussion (5 minutes)

- Groups will come together to compare their findings.

- Each group will identify and discuss at least three key factors to consider when constructing their poultry fold.

**Step 4**: Sharing Findings (5 minutes)

- Each group will present their findings to the class.

- Encourage classmates to ask questions or provide additional input based on their own research and brainstorming.

**Conclusion** (5 minutes):

- Summarize the key points discussed, highlighting the main factors to consider in poultry fold construction.

- Conduct a brief interactive activity where students draw their ideal poultry fold, incorporating the factors learned.

- Preview the next session, which will delve deeper into poultry management and care.

**Extended Activities:**

1. Design Project: Create a detailed plan or model of a poultry fold, incorporating the factors identified in class.

2. Field Trip: Plan a visit to a local farm to observe different types of poultry folds and discuss their strengths and weaknesses with the farmer.

3. Research Assignment: Write a report on the importance of a well-constructed poultry fold and its impact on poultry health and productivity.

**Teacher Self-Evaluation:**

WEEK 6: LESSON 2

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**Strand**: Food Production Processes

**Sub Strand**: Poultry Rearing in a Fold

**Specific Learning Outcomes:**

By the end of the lesson, students will be able to:

1. Identify locally available materials to use in constructing a poultry fold.

2. Outline the steps to follow in constructing a suitable poultry fold.

3. Use digital devices to search for clips on how to construct a poultry fold.

4. Acknowledge the steps to follow in constructing a poultry fold.

**Key Inquiry Question:**

- How can you construct a poultry fold using locally available materials?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Responsibility** | **Financial literacy** |

**Learning Resources**:

- Digital devices (tablets/computers)

- Video clips showing poultry fold construction

- Pictures of various poultry folds

**Organisation of Learning**

**Introduction** (5 minutes)

- Begin by reviewing the previous lesson on poultry care.

- Ask students to share their thoughts on what they remember about poultry and their needs.

- Guide learners to read and discuss content from the learning resources, focusing on poultry folds and their importance.

**Lesson Development** (30 minutes)

**Step 1**: Identifying Materials (10 minutes)

- Divide students into small groups.

- Ask each group to list locally available materials they can use to construct a poultry fold, such as wood, wire, and thatch.

- Groups will share their lists with the class.

**Step 2**: Researching Information (10 minutes)

- Instruct students to use digital devices to search for clips demonstrating how to construct a poultry fold.

- Encourage them to find at least two different sources and discuss what they learned.

**Step 3**: Outlining Construction Steps (5 minutes)

- Each group will outline the steps needed to construct a suitable poultry fold based on their research and the materials identified.

- Groups can create a simple infographic or bulleted list to present their steps.

**Step 4**: Sharing Knowledge (5 minutes)

- Groups present their findings to the class, emphasizing the materials and the outlined construction steps.

- Facilitate a brief Q&A session where students can clarify any doubts.

**Conclusion** (5 minutes)

- Summarize the key points discussed during the lesson, reinforcing the importance of using appropriate materials and following construction steps.

- Conduct a brief interactive quiz where students can reflect on what they learned about constructing poultry folds.

- Prepare students for the next session by introducing the importance of poultry in food production.

**Extended Activities:**

- Field Visit: Organise a visit to a local farm to observe real poultry folds and discuss their construction.

- Creative Project: Have students design their ideal poultry fold on paper, including the materials they would use and the benefits of their design.

- Digital Presentation: Encourage students to create a presentation or a short video demonstrating their understanding of poultry fold construction and sharing it with the class.

**Teacher Self-Evaluation:**

WEEK 6: LESSON 3

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**Strand:** Food Production Processes

**Sub Strand**: Poultry Rearing in a Fold

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

1. Construct a poultry fold for rearing poultry.

2. Value each other’s effort in constructing a suitable fold for poultry rearing.

**Key Inquiry Question:**

- How do you construct a poultry fold?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Responsibility** | **Financial literacy** |

**Learning Resources:**

- Recycled and reused wires, plastic, and wood materials.

- Working area outside the classroom.

**Organisation of Learning**

**Introduction** (5 minutes)

1. Review the previous lesson on poultry care and management.

2. Engage learners in a discussion about the importance of having a suitable fold for poultry rearing.

3. Guide learners to read relevant content from the learning resources, focusing on the key concepts of constructing a poultry fold.

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**Lesson Development** (30 minutes)

**Step 1**: Group Formation (5 minutes)

- Divide the class into small groups of 4-5 students.

- Each group will gather and share their understanding of what a poultry fold is and its importance for poultry rearing.

**Step 2**: Material Preparation (5 minutes)

- In their groups, learners will identify and collect available recycled materials (wires, plastics, woods) from the designated area.

- They should brainstorm and plan how they will utilize these materials to create their poultry fold.

**Step 3**: Construction Phase (15 minutes)

- Allow each group to work collaboratively to construct their poultry fold using the gathered materials.

- Encourage students to discuss their designs with one another, ensuring they think critically about the functionality and safety of their folds.

**Step 4**: Group Presentations (5 minutes)

- Each group will present their constructed poultry fold to the class.

- Other groups will offer constructive feedback and appreciate the efforts of each group, highlighting specific positive aspects of each design.

**Conclusion** (5 minutes)

1. Summarize the key points discussed during the lesson, restating why constructing a proper poultry fold is essential.

2. Conduct a brief interactive activity, such as a quick quiz or a question-and-answer session, to reinforce the main topics covered.

3. Prepare learners for the next session by previewing future topics, such as the needs of poultry, feeding practices, or biosecurity measures.

**Extended Activities:**

1. Research Assignment: Learners can research different types of poultry folds used in various regions around the world and present their findings in the next class.

2. Field Visit Planning: Plan a visit to a local poultry farm to observe real-life examples of poultry folds and discuss their design and maintenance.

3. Design Challenge: Have learners design a poultry fold using computer applications, focusing on incorporating features such as ventilation, safety, and ease of use.

**Teacher Self-Evaluation:**

WEEK 6: LESSON 4

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**Strand:** Food Production Processes

**Sub Strand**: Poultry Rearing in a Fold

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

1. Construct a poultry fold for rearing poultry.

2. Value each other’s effort in constructing a suitable fold for poultry rearing.

**Key Inquiry Question:**

- How do you construct a poultry fold?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Responsibility** | **Financial literacy** |

**Learning Resources:**

- Recycled and reused wires, plastic, and wood materials.

- Working area outside the classroom.

**Organisation of Learning**

**Introduction** (5 minutes)

1. Review the previous lesson on poultry care and management.

2. Engage learners in a discussion about the importance of having a suitable fold for poultry rearing.

3. Guide learners to read relevant content from the learning resources, focusing on the key concepts of constructing a poultry fold.

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**Lesson Development** (30 minutes)

**Step 1**: Group Formation (5 minutes)

- Divide the class into small groups of 4-5 students.

- Each group will gather and share their understanding of what a poultry fold is and its importance for poultry rearing.

**Step 2**: Material Preparation (5 minutes)

- In their groups, learners will identify and collect available recycled materials (wires, plastics, woods) from the designated area.

- They should brainstorm and plan how they will utilize these materials to create their poultry fold.

**Step 3**: Construction Phase (15 minutes)

- Allow each group to work collaboratively to construct their poultry fold using the gathered materials.

- Encourage students to discuss their designs with one another, ensuring they think critically about the functionality and safety of their folds.

**Step 4**: Group Presentations (5 minutes)

- Each group will present their constructed poultry fold to the class.

- Other groups will offer constructive feedback and appreciate the efforts of each group, highlighting specific positive aspects of each design.

**Conclusion** (5 minutes)

1. Summarize the key points discussed during the lesson, restating why constructing a proper poultry fold is essential.

2. Conduct a brief interactive activity, such as a quick quiz or a question-and-answer session, to reinforce the main topics covered.

3. Prepare learners for the next session by previewing future topics, such as the needs of poultry, feeding practices, or biosecurity measures.

**Extended Activities:**

1. Research Assignment: Learners can research different types of poultry folds used in various regions around the world and present their findings in the next class.

2. Field Visit Planning: Plan a visit to a local poultry farm to observe real-life examples of poultry folds and discuss their design and maintenance.

3. Design Challenge: Have learners design a poultry fold using computer applications, focusing on incorporating features such as ventilation, safety, and ease of use.

**Teacher Self-Evaluation:**

WEEK 7: LESSON 1

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**Strand**: Food Production Processes

**Sub Strand**: Poultry Rearing in a Fold

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

1. Display their constructed poultry folds for assessment.

2. Appreciate others' constructed poultry folds.

**Key Inquiry Question:**

- What are the standards of a good poultry fold?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Responsibility** | **Financial literacy** |

**Learning Resources:**

- Constructed Folds

- Digital devices (e.g., cameras or tablets for taking pictures)

**Organisation of Learning:**

Introduction (5 minutes)

- Review the previous lesson on poultry and the importance of having safe and well-designed poultry folds.

- Facilitate a class discussion about poultry fold features, guiding learners to read any relevant content from their learning resources. Focus on the importance of space, ventilation, safety, and animal welfare as key concepts.

**Lesson Development** (30 minutes)

**Step 1**:

- Group Formation: Divide the class into small groups (4-5 students each) and assign each group a space to display their constructed poultry folds.

**Step 2**:

- Display and Photograph: Each group will take turns presenting their constructed poultry folds to the class. They will also take pictures of their folds using digital devices for documentation.

**Step 3**:

- Peer Assessment: Each group will evaluate at least two other groups’ displays. They will use a simple peer assessment checklist (prepared in advance) focusing on key features such as size, safety, and overall design quality.

**Step 4**:

- Feedback and Discussion: After evaluation, each group will provide feedback to the groups they assessed, highlighting strengths and areas for improvement. The class can then discuss the standards of a good poultry fold and any common themes observed in the feedback.

**Conclusion** (5 minutes)

- Summarize the key points discussed during the lesson: the importance of good design in poultry folds and the standards that characterize them.

- Conduct an interactive activity where learners can write one thing they learned on a sticky note and share it with the class.

- Prepare learners for the next session by introducing the upcoming topic: "Nutrition and Feeding Practices for Poultry."

**Extended Activities:**

1. Research Project: Students can choose a specific breed of poultry and research its unique needs regarding housing and care. They can present their findings in a poster format.

2. Design Challenge: Challenge students to improve on their current poultry fold designs based on the feedback received during the activity. This can be done via sketches or digital design tools.

3. Field Trip or Virtual Tour: Organize a visit to a local poultry farm or arrange a virtual tour of an industrial poultry facility to see real-life applications of poultry management.

**Teacher Self-Evaluation:**

WEEK 7: LESSON 2

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**Strand**: Food Production Processes

**Sub Strand**: Poultry Rearing in a Fold

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

- State the benefits of poultry rearing in folds.

- Discuss the benefits of rearing poultry in a fold.

- Search the internet for information on benefits of rearing poultry in folds.

- Acknowledge the benefits of rearing poultry in a fold.

**Key Inquiry Question(s):**

- What are the benefits of rearing poultry in folds?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Responsibility** | **Financial literacy** |

**Learning Resources:**

- Lesson notes

- Digital devices (tablets/computers)

- Resource person (guest speaker or local poultry farmer)

- Video clips on poultry rearing

**Organisation of Learning**

**Introduction** (5 minutes)

- Start the lesson with a quick review of the previous lesson on poultry basics.

- Introduce today's topic and guide learners to read selected excerpts from lesson notes, while discussing the key concepts related to poultry rearing in folds.

**Lesson Development** (30 minutes)

**Step 1**: Brainstorming Session (10 minutes)

- In small groups, ask students to brainstorm and write down the benefits of rearing poultry in folds. Encourage creativity and critical thinking.

**Step 2**: Research (10 minutes)

- In their groups, students will use digital devices to search for additional information on the benefits of rearing poultry in folds. They should look for reliable sources and take notes on what they find.

**Step 3**: Group Discussion (5 minutes)

- Each group will share their findings with the class. Facilitate a discussion highlighting key benefits that were discovered during their research. Encourage students to ask questions and add to each other’s points.

**Step 4**: Guest Speaker (5 minutes)

- Invite a local poultry farmer or agriculture expert to share their experiences and insights about the benefits of poultry rearing in folds. Allow for a brief Q&A session to engage students further.

**Conclusion** (5 minutes)

- Summarize the key points discussed during the lesson and the learning objectives achieved.

- Conduct a quick interactive activity, such as a quiz or a think-pair-share on the benefits discussed.

- Preview the next lesson on poultry nutrition and care, prompting students to consider what factors influence the growth and health of poultry.

**Extended Activities:**

- Poultry Fold Model: Students can create a model or diagram of a poultry fold, illustrating the space layout and how it benefits poultry. They can present their models to the class.

- Field Visit: Arrange a visit to a local poultry farm that utilizes folding systems. Students can observe and ask questions about the benefits in practice.

- Research Paper: Assign students to write a short research paper on the impact of poultry rearing in folds on sustainability and animal welfare.

**Teacher Self-Evaluation:**

WEEK 7: LESSON 3

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**Strand**: Food Production Processes

**Sub Strand**: Poultry Rearing in a Fold (Project)

**Specific Learning Outcomes:**

- By the end of the lesson, the learner should be able to rear poultry in the constructed fold.

- Show responsibility in rearing of poultry.

**Key Inquiry Question**:

- How do you rear poultry in a fold?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Responsibility** | **Financial literacy** |

**Learning Resources:**

- Poultry of choice, folds (poultry housing).

**Organisation of Learning:**

**Introduction** (5 minutes)

1. Review Previous Lesson:

Begin by briefly discussing the key points covered in the last lesson about poultry characteristics and types. Encourage students to share what they remember.

2. Reading and Discussion:

Guide learners to read from the provided resources about poultry rearing. Ask engaging questions to ensure comprehension and to highlight the importance of understanding poultry needs.

**Lesson Development** (30 minutes)

**Step 1**: Understanding the Fold

- Activity: Discuss the design of the fold and its importance for poultry safety and well-being.

- Key points to cover: Space requirements, ventilation, shelter from elements, and protection from predators.

**Step 2**: Practical Group Setup

- Activity: In small groups, learners will set up their fold according to guidelines.

- Role Assignment: Assign roles such as feeder, waterer, cleaner, and observer among group members to promote teamwork.

**Step 3**: Daily Care Routine

- Activity: Demonstrate the daily responsibilities including feeding, watering, and maintaining hygiene within the fold.

- Discussion: Talk about the frequency of these tasks and the importance of each for poultry health and growth.

**Step 4**: Monitoring and Adjusting

- Activity: Guide each group to discuss how to monitor the poultry's health, manage the environment (like preventing overcrowding or ensuring the right temperature), and make necessary adjustments.

- Engagement: Have each group brainstorm potential challenges in rearing poultry and suggest solutions.

**Conclusion** (5 minutes)

- Summarize Key Points: Recap the essential responsibilities of poultry rearing and the role of folds in ensuring their safety and health.

- Interactive Activity: Conduct a quick quiz or a game that involves matching poultry care tasks to their definitions to reinforce learning.

- Preview Next Session: Introduce the next topic on poultry nutrition and encourage students to think about what types of food chickens need for optimal growth.

**Extended Activities**

- Visit a Local Poultry Farm: Arrange a field trip for students to observe professional poultry rearing. Have them prepare questions before the visit.

- Poultry Care Journal: Ask students to keep a journal for a week on their observations if they have poultry at home. This can include notes on feeding, behavior, and any changes they notice.

- Research Project: Assign groups to research different poultry breeds and present their findings, focusing on their care needs and environmental adaptations.

**Teacher Self-Evaluation:**

WEEK 7: LESSON 4

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**Strand**: Food Production Processes

**Sub Strand**: Poultry Rearing in a Fold

Assessment: Attempt assessment questions on the sub-strand: kitchen and backyard Garden & Poultry rearing in fold.

**Specific Learning Outcomes:**

- By the end of the lesson, learners should be able to attempt assessment questions on the sub-strand of kitchen and backyard gardening, as well as poultry rearing in a fold.

**Key Inquiry Questions:**

1. What are the essential factors to consider when rearing poultry in a fold?

2. How can backyard gardening complement poultry rearing?

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| **Core competencies** | **Values** | **PCIs** |
| * **Creativity and imagination** | * **Responsibility** | **Financial literacy** |

**Learning Resources**:

- Assessment books

- MTP Agriculture Learner's Books

- Teacher's Assessment Questions

**Organisation of Learning:**

**Introduction** (5 minutes)

- Review the previous lesson on types of poultry and their benefits in a farming system.

- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of poultry rearing practices and the importance of maintaining a clean and safe environment for the birds.

**Lesson Development** (30 minutes)

**Step 1**:

- Topic Introduction: Introduce the concept of poultry rearing in a fold. Explain what a fold is and its purpose in poultry farming. Share key benefits, such as protection from predators and weather.

**Step 2**:

- Group Discussion: In pairs, learners discuss what they think are the necessary conditions for successful poultry rearing in a fold. They should consider aspects such as space, ventilation, food, water, and cleanliness.

**Step 3**:

- Hands-On Activity: Provide each pair with a diagram of a poultry fold. Learners will label important parts of the fold and jot down ideas for improvement based on their earlier discussions.

**Step 4**:

- Assessment Preparation: Introduce assessment questions related to backyard gardening and poultry rearing. Guide learners on how to approach the questions, utilizing the knowledge gained from the lesson and previous resources.

**Conclusion** (5 minutes)

- Summarize key points covered regarding poultry rearing in a fold and how it integrates with backyard gardening.

- Conduct a quick interactive quiz using a few of the assessment questions to reinforce the main topics discussed.

- Provide a sneak preview of the next session, which will delve into proper feeding and nutrition for poultry.

**Extended Activities:**

- Research Project: Ask learners to create a mini-project about different breeds of poultry suited for backyard rearing. They should include care requirements and any nutritional needs.

- Field Trip: If possible, arrange a visit to a local farm that practices poultry rearing to observe and ask questions about real-life application.

- Garden Plan: Encourage learners to design a layout for their ideal backyard garden that incorporates space for poultry. They can present this in the next class, discussing how the garden supports their poultry rearing efforts.

**Teacher Self-Evaluation:**

WEEK 9: LESSON 1

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**Strand**: Food Production Processes

**Sub Strand**: Crop Pest and Disease Control

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

- State ways of identifying vegetable crops attacked by pests.

- Discuss the ways of identifying vegetable crops attacked by pests.

- Take a field excursion to observe and identify vegetable crops that are attacked by pests.

- Acknowledge the ways of identifying vegetable crops attacked by pests.

**Key Inquiry Question(s):**

- How can we identify vegetable crops attacked by pests?

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| **Core competencies** | **Values** | **PCIs** |
| * **Learning to learn** | * **Respect** | **Disaster risk reduction** |

**Learning Resources:**

- MTP Agriculture Learner's Book

- Lesson notes

- School farm

- Vegetable crops

**Organisation of Learning:**

**Introduction** (5 minutes)

- Review the previous lesson on the importance of healthy crops and the impact of pests.

- Facilitate a brief discussion where learners can share their thoughts on crop health. Prompt them to think about visible damage in plants and what might cause it.

**Lesson Development** (30 minutes)

**Step 1**: Brainstorming (10 minutes)

- In small groups, learners will brainstorm and write down various signs that indicate vegetable crops might be under pest attack. Encourage them to think creatively and consider different types of pests.

**Step 2**: Group Discussion (10 minutes)

- Groups will share their thoughts with the class. Write down the identified signs on the board (e.g., holes in leaves, discolored foliage, presence of insects, etc.).

- Discuss as a class why these signs are important for identifying pests early.

**Step 3**: Field Excursion Preparation (5 minutes)

- Explain the plan for the upcoming field excursion. Describe the specific vegetable crops they will observe and the signs of pest damage they should look for when identifying if a crop is affected.

**Step 4**: Outlining Common Pests (5 minutes)

- Present a brief overview of common vegetable pests (e.g., aphids, caterpillars, beetles) and their typical signs of damage. Discuss where they are most commonly found on plants (e.g., undersides of leaves, stems, etc.).

**Conclusion** (5 minutes)

- Summarize the key points discussed during the lesson: signs of pest damage, common pests, and the importance of early identification.

- Conduct a quick interactive quiz with true or false statements about pest identification.

- Prepare learners for the next session by previewing the topic of pest management strategies.

**Extended Activities:**

- Create a Pest Diary: Learners can keep a diary for a week where they observe and record any pests they find on plants at home or in the school garden.

- Research Project: Assign students to research a specific pest and its impact on local vegetable crops. They can present their findings to the class.

- Art Activity: Have learners create posters showing different types of vegetable pests, their signs, and prevention methods. These can be displayed in the classroom or school garden.

**Teacher Self-Evaluation:**

WEEK 9: LESSON 2

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**Strand**: Food Production Processes

**Sub Strand**: Crop Pest and Disease Control

**Specific Learning Outcomes:**

By the end of the lesson, students should be able to:

1. State ways of identifying vegetable crops attacked by diseases.

2. Discuss the ways of identifying vegetable crops attacked by diseases.

3. Take a field excursion to observe and identify vegetable crops attacked by diseases.

4. Acknowledge the signs of vegetable crop disease.

**Key Inquiry Question(s):**

- How can you know that vegetable crops have been affected by diseases?

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| **Core competencies** | **Values** | **PCIs** |
| * **Learning to learn** | * **Respect** | **Disaster risk reduction** |

**Learning Resources:**

- Vegetable garden

- Pictures of diseased crops

- MTP Agriculture Learner's Book

- Lesson notes

- Digital devices (tablets/smartphones for research/documentation)

**Organisation of Learning**

**Introduction** (5 minutes)

- Briefly review the previous lesson on vegetable crop health.

- Ask students for examples of signs they might have learned about in the prior session.

- Introduce the day's topic and guide learners to read and discuss relevant content from the learning resources to reinforce understanding.

**Lesson Development** (30 minutes)

**Step 1**: Brainstorming Session

- In small groups, have students brainstorm ways to identify when a vegetable crop is affected by disease.

- Provide them a list on the board to aid their discussion (e.g., yellow leaves, stunted growth, unusual spots).

**Step 2**: Group Discussion

- Each group will select a representative to share their findings with the class.

- Facilitate a class-wide discussion, allowing other students to add to or ask questions about each group's observations.

**Step 3**: Field Excursion

- Take a field trip to a nearby vegetable garden.

- Allow students to walk around, observe, and identify vegetable crops that show signs of disease.

- Instruct them to take pictures of any affected crops, focusing on different symptoms.

**Step 4**: Documentation and Reflection

- Back in the classroom, students will compile their findings.

- Each group should prepare a short presentation explaining the symptoms they observed and hypothesizing about possible causes.

- Encourage students to relate their observations to the concepts reviewed in the lesson.

**Conclusion** (5 minutes)

- Summarize the key points discussed in the lesson, such as the common symptoms of vegetable crop diseases.

- Conduct a brief interactive activity where students match images of diseases to their descriptions.

- Share a preview of the next session's topic on pest management and its relation to crop diseases.

**Extended Activities:**

1. Research Project: Assign students to pick one common vegetable crop disease to research and present its symptoms, causes, and management strategies.

2. Create a Disease Guide: Have students create a small booklet or digital guide that includes pictures, descriptions, and management tips for various vegetable diseases they might find in the garden.

3. Class Garden Observation Journal: Initiate a classroom garden observation journal where students will regularly log observations of the vegetable crops, noting any diseases, pests, or changes in health throughout the growing season.

**Teacher Self-Evaluation:**

WEEK 9: LESSON 3

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
|  | GRADE 8 | AGRICULTURE AND NUTRITION |  |  |  |

**Strand**: Food Production Processes

**Sub Strand**: Crop Pest and Disease Control

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

1. Identify the methods of controlling pests on vegetable crops.

2. Discuss the methods of controlling pests on vegetable crops.

3. Use the methods to control pests on vegetable crops in the school garden.

4. Appreciate the different methods of controlling pests on vegetable crops.

**Key Inquiry Question:**

- How can we control pests on vegetable crops?

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| **Core competencies** | **Values** | **PCIs** |
| * **Learning to learn** | * **Respect** | **Disaster risk reduction** |

**Learning Resources**:

- Vegetable Garden

- MTP Agriculture Learner's Book

- Lesson notes

- Digital devices (for research and presentations)

**Organisation of Learning**

**Introduction** (5 minutes)

- Begin with a quick review of the previous lesson focused on vegetable crops and their growth requirements.

- Ask students to share their thoughts on pest problems they may have noticed in their gardens.

- Guide learners to read and discuss relevant content from the learning resources, focusing on understanding pest control methods.

**Lesson Development** (30 minutes)

**Step 1**:Brainstorming

- In small groups, learners will brainstorm various methods to control pests on vegetable crops.

- Encourage each group to think about both natural and chemical methods.

- After 10 minutes, have each group present their ideas to the class.

**Step 2**: Discussion

- Facilitate a class discussion focusing on the methods presented.

- Highlight effective practices and any misconceptions.

- Discuss the pros and cons of different methods to control pests (e.g., natural pesticides vs. synthetic chemicals).

**Step 3**: Practical Application

- Take students to the school garden.

- Provide hands-on experience where students can practice pest control methods:

- Handpicking pests off plants

- Removing affected leaves or parts

- Uprooting heavily affected plants

- Applying natural pesticides, such as ash, where applicable.

**Step 4**: Reflection

- After the practical application, have students reflect in their journals about what methods they found most useful and why.

- Encourage them to think about how they might apply these techniques in their home gardens.

**Conclusion** (5 minutes)

- Recap the key points covered in the lesson, emphasizing the importance of pest control for healthy vegetable crops.

- Conduct a brief interactive activity, such as a quiz or a quick discussion, to reinforce the main topics.

- Preview the upcoming lesson on organic farming methods and pose thought-provoking questions about the impact of pesticides on health and the environment.

**Extended Activities**

- Research Project: Have students choose one pest they commonly see in their area and prepare a presentation on its impact and control methods.

- Gardening Journal: Encourage students to keep a journal of their observations and pest management practices in their gardens throughout the season.

- Guest Speaker: Invite a local farmer or agricultural expert to speak with the class about sustainable pest control techniques used in commercial vegetable farming.

**Teacher Self-Evaluation:**

WEEK 9: LESSON 4

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
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**Strand**: Food Production Processes

**Sub Strand**: Crop Pest and Disease Control

**Specific Learning Outcomes:**

By the end of the lesson, the learner should be able to:

1. Identify methods used to control diseases on vegetable crops.

2. Discuss the methods used in controlling diseases on affected vegetable crops.

3. Use the methods to control diseases on vegetable crops.

4. Acknowledge the methods of controlling diseases on vegetable crops.

**Key Inquiry Question:**

- How can one control diseases on vegetable crops?

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| **Core competencies** | **Values** | **PCIs** |
| * **Learning to learn** | * **Respect** | **Disaster risk reduction** |

**Learning Resources:**

- Vegetable Garden

- Lesson notes

- Digital devices

- MTP Agriculture Learner's Book

**Organisation of Learning:**

**Introduction** (5 minutes):

- Review the previous lesson about the importance of healthy crops and the impact of diseases.

- Guide learners to read and discuss relevant content from the MTP Agriculture Learner's Book, focusing on the key question of disease control methods.

**Lesson Development** (30 minutes):

**Step 1**: Introduce the Topic (10 minutes)

- Present various signs and symptoms of diseases commonly found in vegetable crops (e.g., wilting, discoloration).

- Initiate a discussion about the causes of these diseases (e.g., pathogens, environmental conditions) to set context.

**Step 2**: Group Brainstorming Activity (10 minutes)

- Divide pupils into small groups and assign them to brainstorm different methods to control diseases in vegetable crops.

- Each group will list their ideas on a digital device or paper. Facilitate as groups share their ideas, ensuring all methods are noted.

**Step 3**: Discussion of Methods (5 minutes)

- Each group will present their findings to the class, discussing the most effective methods they identified, such as:

- Removing affected plant parts (e.g., leaves or branches)

- Uprooting heavily affected crops to prevent disease spread

- Utilizing pesticides or organic solutions

**Step 4**: Practical Application (5 minutes)

- Instruct learners to role-play a scenario where they must choose the appropriate method of disease control for a hypothetical vegetable crop problem presented in class.

- Encourage critical thinking as they explain the reasoning behind their choices.

**Conclusion** (5 minutes):

- Summarize key points discussed in the lesson, including methods to control diseases on vegetable crops.

- Conduct a quick interactive quiz or a “one-minute reflection” where students write down one new thing they learned.

- Preview the next session, highlighting the importance of maintaining plant health and hinting at topics such as pest control methods.

**Extended Activities:**

- Home Assignment: Ask students to create a simple disease management plan for a vegetable crop they can grow at home or in their community garden, detailing the methods they would use for prevention and control.

- Field Trip: Plan a visit to a local farm or agricultural research center to observe real-life applications of disease control methods in vegetable production.

- Research Project: Assign a short research project on a specific vegetable disease, its impact, and its control methods, encouraging students to present their findings creatively (poster, video, presentation).

**Teacher Self-Evaluation:**

WEEK 10: LESSON 1

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**Strand**: Food Production Processes

**Sub Strand**: Crop Pest and Disease Control

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

- State the importance of controlling crop pests and diseases in vegetable production.

- Discuss the impact of not controlling pests and diseases on the yield and quality of vegetables.

- Search the internet and other sources for information on pest and disease control in vegetable farming.

- Acknowledge the significance of these practices in sustainable agriculture.

**Key Inquiry Question:**

- What is the importance of controlling pests and diseases in vegetable production?

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| **Core competencies** | **Values** | **PCIs** |
| * **Learning to learn** | * **Respect** | **Disaster risk reduction** |

**Learning Resources:**

- Lesson notes.

- MTP Agriculture Learner's Book.

- Digital devices (laptops/tablets or smartphones).

- Posters related to crop pests and diseases.

**Organisation of Learning:**

**Introduction** (5 minutes)

- Quickly review the main points from the previous lesson on vegetable production.

- Guide learners in reading the relevant content from the learning resources, focusing on the threats posed by pests and diseases and their effects on crops.

**Lesson Development** (30 minutes)

**Step 1**: Brainstorming Session (10 minutes)

- In small groups, ask learners to brainstorm the types of pests and diseases that can affect vegetable crops.

- Each group lists their ideas on a poster or whiteboard.

**Step 2**: Research Activity (10 minutes)

- Using digital devices or print resources, learners search for information on the importance of controlling these pests and diseases.

- Encourage them to focus on how control measures improve yield, quality, and sustainability.

**Step 3**: Group Discussion (5 minutes)

- After the research, groups discuss their findings and consider: Why is it important to control pests? What could happen if we don't?

**Step 4**: Presenting Findings (5 minutes)

- Groups present their key insights to the class based on their discussions and research.

- Encourage questions and open discussion after each presentation to deepen understanding.

**Conclusion** (5 minutes)

- Summarize key points and the learning objectives achieved: the significance of pest and disease control in vegetable production.

- Conduct a quick interactive quiz or game (like Kahoot) to reinforce knowledge gained during the lesson.

- Preview the next session, mentioning that they will be exploring specific control methods.

**Extended Activities:**

- Field Trip: Organize a visit to a local farm to observe pest control measures in action.

- Research Assignment: Have students pick a specific pest or disease and prepare a short report on its life cycle, effects on crops, and control measures used.

- Create a Pest Control Guide: In pairs, students can develop a simple pest control guide for a vegetable they commonly grow, including preventive measures and remedies.

**Teacher Self-Evaluation:**

WEEK 10: LESSON 2

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
|  | GRADE 8 | AGRICULTURE AND NUTRITION |  |  |  |

**Strand**: Food Production Processes

**Sub Strand**: Crop Pest and Disease Control

**Specific Learning Outcomes**

By the end of the lesson, the learner should be able to attempt assessment questions on the sub-strand: Crop Pest and Disease Control.

**Key Inquiry Question(s)**

- What are the different types of pests that affect crops, and how can we control them?

- What methods can be used to prevent and manage crop diseases?

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| **Core competencies** | **Values** | **PCIs** |
| * **Learning to learn** | * **Respect** | **Disaster risk reduction** |

**Learning Resources**

- Assessment books

- MTP Agriculture Learner's Book

- Teacher's Assessment Questions

**Organisation of Learning**

**Introduction** (5 minutes)

- Review the previous lesson on the importance of healthy crops for food production.

- Guide learners to read and discuss relevant content from MTP Agriculture Learner's Book, focusing on understanding pests and diseases that affect crops.

**Lesson Development** (30 minutes)

**Step 1**: Identification of Pests and Diseases (10 minutes)

- Begin the lesson by asking students to list common pests and diseases they learned about in the previous lesson.

- Discuss the characteristics of these pests and diseases with the class, highlighting their impact on crop yield.

**Step 2**: Discussion of Control Methods (10 minutes)

- Introduce various control methods for pests and diseases, such as chemical controls (pesticides), natural predators, and crop rotation.

- Split students into pairs to discuss and share additional pest control methods they might know.

**Step 3**: Application through Assessment Questions (5 minutes)

- Distribute the assessment questions from the Teacher's Assessment Questions. Have students work individually to answer these questions, applying what they learned about pest and disease control.

**Step 4**: Reflection and Sharing (5 minutes)

- Regroup as a class and invite a few students to share their responses to the assessment questions. Facilitate a discussion about the different approaches to pest management they wrote about.

**Conclusion** (5 minutes)

- Summarize the key points covered in the lesson, emphasizing the understanding of pest types and their control methods.

- Conduct a brief interactive quiz using a few questions from the assessment as a fun, quick review.

- Prepare learners for the next session by revealing that the next lesson will focus on integrated pest management strategies.

**Extended Activities**

- Research Project: Assign students to research a specific pest or disease affecting local crops and present their findings, including control methods and prevention strategies.

- Field Trip: Plan a visit to a local farm or agricultural extension office to observe real-life crop pest control methods and ask questions from professionals in the field.

- Create an Informative Poster: Students can create posters that illustrate different types of pests, diseases, and effective control methods to display in the classroom.

**Teacher Self-Evaluation:**

WEEK 10: LESSON 3

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
|  | GRADE 8 | AGRICULTURE AND NUTRITION |  |  |  |

**Strand**: Food Production Processes

**Sub Strand**: Preparation of Animal Products

**Specific Learning Outcomes:**

- State the importance of processing fish.

- Use digital devices to search for information on the importance of processing fish.

- Acknowledge the importance of processing fish.

Key Inquiry Question(s):

- What is the importance of processing fish and dressing poultry carcass?

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| **Core competencies** | **Values** | **PCIs** |
| * **Learning to learn** | * **Integrity** | **Animal welfare** |

**Learning Resources:**

- Digital devices (tablets/laptops)

- Lesson notes

- MTP Agriculture Learner's Book

**Organisation of Learning:**

**Introduction** (5 minutes)

- Review the key concepts covered in the previous lesson about animal products.

- Ask students questions to activate prior knowledge (e.g., “What do we know about fish and its uses?”).

- Introduce the day’s focus on the importance of processing fish.

**Lesson Development** (30 minutes)

**Step 1**: Define Animal Products (10 minutes）

- Group Activity: Divide the learners into small groups.

- Each group will define the term "animal products" and create a mind map of examples, including fish.

- Groups will share definitions with the class.

**Step 2**: Research Importance (10 minutes)

- Instruct students to use digital devices to search for information on the importance of processing fish (e.g., health benefits, preservation, economic value).

- Provide specific websites or articles as guides.

- Students will summarize the key findings in their own words.

**Step 3**: Discuss Experiences (5 minutes)

- Have students return to their groups to discuss their findings.

- Encourage them to share any personal experiences with fish processing, if applicable, or cultural practices related to fish.

**Step 4**: Group Presentation (5 minutes)

- Each group will present their definitions, findings, and discussions to the class.

- Encourage peers to ask questions or provide additional thoughts on the presentations.

**Conclusion** (5 minutes)

- Summarize key points from each group's presentations, emphasizing the overall importance of processing fish.

- Conduct an interactive activity, such as a quick quiz or a Q&A session, to reinforce what was learned.

- Preview the next session by introducing the topic of processing poultry and pose questions such as, “How does poultry processing compare to fish processing?”

**Extended Activities:**

- Fish Processing Project: Students could the home with a fish (or similar item) and research traditional fish processing methods used in various cultures. They could then present their findings in the next class.

- Cooking Demonstration: Organize an event where students can participate in a safe and guided cooking activity that showcases processed fish dishes, linking theoretical and practical aspects of fish preparation.

- Field Trip: Arrange a visit to a local fish market or a processing plant to see the real-world applications of what they learned.

**Teacher Self-Evaluation:**

WEEK 10: LESSON 4

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**Strand**: Food Production Processes

**Sub-Strand**: Preparation of Animal Products

**Specific Learning Outcomes:**

By the end of the lesson, students should be able to:

1. State the importance of dressing poultry carcass.

2. Discuss the importance of dressing poultry carcass.

3. Research the internet for information on the importance of dressing poultry carcass.

4. Acknowledge the importance of dressing poultry carcass.

**Key Inquiry Question(s):**

- What is the importance of dressing poultry carcass?

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| **Core competencies** | **Values** | **PCIs** |
| * **Learning to learn** | * **Integrity** | **Animal welfare** |

**Learning Resources:**

- Digital devices (tablets, laptops, etc.)

- Lesson notes

- MTP Agriculture Learner's Book

- Video clips related to poultry dressing

**Organisation of Learning**

**Introduction** (5 minutes)

- Briefly review the previous lesson on poultry farming.

- Introduce the topic of poultry dressing, engaging learners with questions about what they know or have seen regarding poultry preparation.

**Lesson Development** (30 minutes)

**Step 1**: Group Brainstorming (10 minutes)

- Divide the class into small groups.

- Each group brainstorms and lists the reasons why dressing a poultry carcass is important. Encourage them to think about health, hygiene, and food quality.

**Step 2**: Research Activity (10 minutes)

- Guide learners to use digital devices to search for credible information regarding poultry dressing.

- Each group should focus on finding at least three key points or facts that highlight the significance of the dressing process.

**Step 3**: Group Discussion (5 minutes)

- Once research is complete, groups reconvene to discuss their findings.

- Each group prepares to share their key points with the class, emphasizing different aspects such as health safety or economic significance.

**Step 4:** Presentation (5 minutes)

- Invite each group to present their gathered information to the class.

- As groups present, encourage other students to ask questions or offer additional insights, fostering a discussion about the importance of dressing poultry.

**Conclusion** (5 minutes)

- Summarize the key points discussed during the lesson, reinforcing the learning objectives.

- Conduct a brief interactive quiz or activity, such as a "think-pair-share" to reinforce the significance of the chicken dressing process.

- Preview the next topic, which will explore the steps involved in dressing poultry.

**Extended Activities:**

1. Field Trip or Virtual Tour: Organize a field trip to a local poultry farm or arrange a virtual tour of a processing facility to observe the dressing process in a practical setting.

2. Research Project: Assign students to write a short report or create a presentation on the history of poultry processing and its development over time.

3. Cooking Demonstration: Plan a cooking session where students can prepare a dish using poultry, discussing food hygiene and preparation techniques.

**Teacher Self-Evaluation:**

WEEK 11: LESSON 1

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**Strand**: Food Production Processes

**Sub Strand:** Preparation of Animal Products

**Specific Learning Outcomes**:

By the end of the lesson, learners should be able to:

- Identify the processes involved in the processing of fish.

- Discuss the processes involved in the processing of fish.

- Use digital devices to search and watch clips on processing of fish.

- Appreciate the processes involved in processing of fish.

**Key Inquiry Question(s):**

- How can we process fresh fish?

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| **Core competencies** | **Values** | **PCIs** |
| * **Learning to learn** | * **Integrity** | **Animal welfare** |

**Learning Resources:**

- Lesson notes

- Digital devices

- MTP Agriculture Learner's Book

- Video clips

**Organisation of Learning**

**Introduction** (5 minutes)

- Begin the class by reviewing the previous lesson on food production.

- Prompt students to recall any relevant knowledge they have about fish as a food source.

- Read and discuss key concepts related to fish processing from the learning resources, focusing on why processing is important.

**Lesson Development** (30 minutes)

**Step 1**: Identify Fish Processing Steps (10 minutes)

- Divide students into small groups.

- Provide each group with a list of steps involved in fish processing (scaling, gutting, cleaning, salting, and frying).

- Ask groups to match each step with its description and share their findings with the class.

**Step 2**: Discuss the Procedure (10 minutes)

- Groups discuss the importance of each step in the fish processing procedure.

- Facilitate a class discussion, encouraging learners to ask questions and share their thoughts on why proper processing is vital for safety and quality.

**Step 3**: Research and Watch Video Clips (5 minutes)

- Guide students to use digital devices to search for and watch short video clips that demonstrate the fish processing steps.

- After viewing, ask students to note any additional techniques or insights they gained from the videos.

**Step 4**: Appreciate the Process (5 minutes)

- Regroup to discuss the videos and what new information students discovered.

- Lead a discussion on how processing affects the taste, safety, and shelf-life of fish and link this back to real-world applications, such as cooking or fish markets.

**Conclusion** (5 minutes)

- Summarize the key points covered during the lesson: the steps involved in fish processing, their importance, and what was learned from the video clips.

- Conduct a brief interactive activity, such as a quiz or a fish processing steps review game, to reinforce the main topics.

- Preview the next session by introducing topics such as sustainability in fish farming or other animal products processing.

**Extended Activities:**

- Fish Processing Project: Have students create a step-by-step guide or poster illustrating the fish processing steps including images and descriptions.

- Field Trip: If possible, arrange a field trip to a local fish market or processing plant to observe fish processing in real-time.

- Cooking Class: Organize a cooking session where students can apply what they’ve learned by preparing dishes with fish, focusing on applying safe handling practices.

**Teacher Self-Evaluation:**

WEEK 11: LESSON 2

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**Strand**: Food Production Processes

**Sub Strand:** Preparation of Animal Products

**Specific Learning Outcomes:**

By the end of the lesson, learners should be able to:

1. Identify the processes involved in dressing a poultry carcass.

2. Discuss the procedure for dressing a poultry carcass.

3. Use digital devices to search for and watch video clips on dressing poultry carcasses.

4. Appreciate the importance of proper techniques in dressing poultry.

**Key Inquiry Question:**

How can we dress a poultry carcass?

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| **Core competencies** | **Values** | **PCIs** |
| * **Learning to learn** | * **Integrity** | **Animal welfare** |

**Learning Resources:**

- Digital devices (tablets, laptops, etc.)

- Lesson notes

- Video clips on poultry dressing

- MTP Agriculture Learner's Book

**Organisation of Learning:**

**Introduction** (5 minutes)

- Begin with a brief review of the previous lesson on animal husbandry and food production. Ask students to share what they remember.

- Introduce the topic of dressing poultry carcasses and guide students to skim through relevant sections in their learning resources.

**Lesson Development** (30 minutes)

**Step 1**: Share Personal Experiences (10 minutes)

- In groups of 4-5, have students share any personal experiences they have had with poultry dressing or cooking.

- Encourage each group to list the key steps that they believe are involved in the process.

**Step 2**: Explore the Processes (10 minutes)

- Guide the groups to discuss and outline the processes involved in dressing a poultry carcass. Key points to include:

1. Stunning

2. Bleeding

3. Plucking feathers

4. Evisceration

5. Inspection and cleaning

- Each group should summarize their discussions on a piece of paper.

**Step 3**: Watch Video Clips (5 minutes)

- Direct students to digital devices and allow them to search for video clips related to the dressing of poultry carcasses.

- Show a selected video clip to the whole class and encourage learners to take notes on what they observe.

**Step 4**: Group Discussion (5 minutes)

- After watching the video, reconvene and discuss what they learned from the video. Prompt questions such as:

- What steps stood out to you?

- Were there any differences between the video and your earlier discussions?

**Conclusion** (5 minutes)

- Summarize key points discussed during the lesson: the main processes of dressing poultry and why each step is important.

- Conduct a brief interactive activity, such as a quiz or a pairing of facts and steps, to reinforce the main concepts.

- Provide a preview of the next session, mentioning that students will learn about hygiene practices during handling of poultry products.

**Extended Activities:**

- Have students create a step-by-step visual guide or infographic illustrating the proper process of dressing a poultry carcass. This can be done individually or in groups.

- Set up a role-play scenario where students demonstrate the proper handling and dressing of a poultry carcass in a safe and controlled environment (such as a simulation or video demonstration).

- Encourage students to research different methods of poultry preparation globally. They can present their findings in a future class.

**Teacher Self-Evaluation:**

WEEK 11: LESSON 3

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**Strand**: Food Production Processes

**Sub Strand**: Preparation of Animal Products

**Specific Learning Outcomes**:

By the end of the lesson, the learner should be able to:

1. Outline the ethical and safety practices involved in the preparation of animal products.

2. Discuss the ethical and safety practices involved in the preparation of animal products.

3. Create awareness messages on ethical issues and safety practices in the preparation of animal products.

4. Uphold ethical and safety practices in the preparation of animal products.

**Key Inquiry Question:**

- What ethical issues and safety practices should we follow when preparing animal products?

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| **Core competencies** | **Values** | **PCIs** |
| * **Learning to learn** | * **Integrity** | **Animal welfare** |

**Learning Resources**:

- Digital devices

- Lesson notes

- Posters

- Manillas and marker pens

**Organisation of Learning**:

**Introduction** (5 minutes)

- Review the previous lesson on animal products and their significance in food production.

- Introduce today's focus on ethical and safety practices.

- Guide learners to discuss key concepts using digital resources and provided lesson notes.

**Lesson Development** (30 minutes)

**Step 1**: Brainstorming Session (10 minutes)

- In groups, learners will brainstorm the ethical practices involved in preparing animal products. Examples may include animal welfare, humane treatment, and minimizing suffering.

- Each group will note down their ideas on manillas.

**Step 2**: Research and Discussion (10 minutes)

- Groups will use digital devices to research safety practices in the preparation of animal products, such as hygiene, proper cooking temperatures, and avoiding cross-contamination.

- After research, groups will discuss their findings and prepare a short summary.

**Step 3**: Creating Awareness Messages (5 minutes)

- Each group will create a poster or a digital slide that summarizes their findings on ethical issues and safety practices. They should include catchy slogans or phrases to raise awareness among their peers.

**Step 4**: Presentations (5 minutes)

- Groups will present their awareness posters to the class, explaining the ethical and safety practices they’ve discussed. Encourage questions and feedback from classmates to foster engagement.

**Conclusion** (5 minutes)

- Summarize key points discussed during the lesson, including the importance of ethical and safety practices in preparing animal products.

- Conduct a brief interactive quiz or game to reinforce main topics.

- Preview next session's focus on animal product processing techniques, encouraging learners to think about how ethics play a role in these processes.

**Extended Activities:**

1. Field Trip: Plan a visit to a local farm or food processing facility to observe ethical practices in action and enhance students' real-world connections.

2. Creative Writing: Ask students to write a short essay or story from the perspective of an animal, reflecting on ethical treatment and safety concerns.

3. Debate: Organize a class debate around a relevant ethical issue in animal product preparation, encouraging critical thinking and respectful discussion.

**Teacher Self-Evaluation:**

WEEK 11: LESSON 4

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| SCHOOL | LEVEL | LEARNING AREA | DATE | TIME | ROLL |
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**Strand**: Food Production Processes

**Sub Strand**: Preparation of Animal Products

**Specific Learning Outcomes:**

- By the end of the lesson, learners should be able to carry out an activity on either:

1. Dressing poultry carcass

2. Processing fresh fish for various purposes

- Uphold ethical and safety practices in the preparation of animal products.

**Key Inquiry Question(s):**

- What safety practices should one observe when preparing animal products?

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| **Core competencies** | **Values** | **PCIs** |
| * **Learning to learn** | * **Integrity** | **Animal welfare** |

**Learning Resources:**

- Fresh fish

- Poultry carcass

- School kitchen

- Knives

- Chopping board

- Digital devices (for research and presentations)

**Organisation of Learning**

**Introduction** (5 minutes)

- Begin with a brief review of the previous lesson, focusing on the importance of animal products in our diets and ways they can be safely prepared.

- Pose the inquiry question to engage learners: “What safety practices should one observe when preparing animal products?” Facilitate a discussion to elicit prior knowledge.

**Lesson Development** (30 minutes)

- **Step 1**: Group Formation and Activity Choice (5 minutes)

- Organize learners into small groups and allow them to choose whether they will process fresh fish or dress a poultry carcass. Encourage them to discuss their choice and its implications.

**- Step 2**: Research and Safety Discussion (10 minutes)

- Each group uses digital devices or available resources to research the specific processes for their chosen activity.

- Each group must create a list of safety practices relevant to their activity (e.g., handling knives safely, maintaining hygiene, proper disposal of waste).

**- Step 3**: Practical Demonstration (10 minutes)

- In their groups, students follow the correct procedures to either dress the poultry or process the fish, using the provided resources.

- As groups work, circulate among them to ensure adherence to safety standards and correct methods.

**- Step 4**: Presentation and Reflection (5 minutes)

- Each group presents their findings and shares the process they followed. They should highlight the safety practices they implemented and any challenges faced during the activity.

- Facilitate a class discussion to reflect on the different methods used by each group, comparing them and discussing decisions made.

**Conclusion** (5 minutes)

- Summarize the key points regarding the processing of animal products and the importance of adhering to safety practices.

- Conduct a brief interactive quiz or game (e.g., “Safety Bingo”) where students can identify safe practices discussed in class.

- Prepare learners for the next session by giving them a preview of the upcoming topics, such as food preservation techniques.

**Extended Activities**:

- Activity 1: Have students create a poster outlining best practices for handling and preparing various animal products, including key safety tips and ethical considerations.

- Activity 2: Organize a field trip to a local market or farm to observe professional butchering or fish processing, followed by a reflective essay on what they learned about safety and ethics in food production.

- Activity 3: Invite an expert (e.g., a local chef or butcher) to speak about their experiences and provide hands-on demonstrations of ethical and safe preparation of animal products.

**Teacher Self-Evaluation**: