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| **Learning Planner** |
| **Subject** | Agriculture | **Week** | 3 | **Duration** | 120 minutes | **Form** |  1 |
| **Strand** | Concept of Agriculture in an Industrializing Society | **Sub-Strand** | Agriculture and Industry |
| **Content Standard** | Demonstrate knowledge and understanding of the meaning, importance and interdependence of Agriculture and industry.  |
| **Learning Outcome(s)** | Use the knowledge acquired on the meaning, importance and the interdependence of Agriculture and industry to help promote growth and development of the agriculture sector. |
| **Learning****Indicator(s)** | * 1. Explain the meaning and importance of industry in Agriculture.
	2. Discuss the interdependence of Agriculture and industry.
	3. Analyze the economic challenges and solutions of Agriculture in an industrializing society.
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| **Essential Question(s)**  | 1. How will the meaning and importance of industry in Agriculture help the learner in their world of work/ in the furtherance of their career
2. How will the interdependence of industry and agriculture help promote growth and development of the agriculture sector
3. How can resources be used for effective teaching and learning of the economic challenges and solutions of Agriculture in an industrializing society.
4. What
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| **Pedagogical Strategies** | Think-pair-share, Inquiry-based learning, Problem-based learning, Experiential learning, Initiating talk for learning, Collaborative learning, etc. |
| **Teaching & Learning Resources** | Internet connectivity, Computer, Pictures or charts of Corn mill, industries, finished agricultural products such as tin tomatoes, milk, shoes, etc. |
| Key Notes on Differentiation |
| Theme/Focal Area 1i. Learning Tasks* Define industry in Agriculture?
* Discuss the types of industries in Agriculture and their importance.
* Identify the agro-based industries in your community and what they produce.

ii. Pedagogical Exemplars * Think-pair-share: The teacher asks learners to think about the meaning of industry in Agriculture and share their thoughts in pairs. The teacher provides clues to learners with difficulties to guide them to define the meaning of industry in Agriculture. Encourage other learners who are capable to delve deeper into bringing out further explanation of the meaning of industries in Agriculture.
* Inquiry-based learning: Put learners in mixed-ability/gender-based groups (where applicable) for them to surf the internet to come up with the types of industries in Agriculture and their importance in promoting growth and development. Teacher should assist learners with website links to where, they can access information on the types of industries in Agriculture and their importance in promoting growth and development. Teacher should monitor learners not to veer into unapproved sites. Teacher should ensure that all learners fully participate in the activity to prevent a few learners from hijacking the activity. Learners who know how to surf the internet should be encouraged to assist those with difficulties.
* Problem-based learning: In the same groups, learners prepare a table to show the agro-based industries in their community and what they produce. All learners should be involved in the preparation of a table. Teacher should provide extra support to students who might need it.

iii. Key Assessments * Assessment Level 1: Define industry in Agriculture?
* Assessment Level 2: Discuss at least two (2) importance of industries in Agricultural production.
* Assessment Level 3: Research on the agro-based Industries in your community and what they produce.
* Assessment Level 4: What agro-based industry can be established in your community and why?

Theme/Focal Area 2i. Learning Tasks* + List the interdependencies between Agriculture and industry.
	+ Explain the interdependencies between Agriculture and industry,
	+ Discuss how the interdependency between Agriculture and industry promotes Agricultural development.

ii. Pedagogical Exemplars * Project-based learning: Put learners in mixed-gender/mixed-ability groups (where appropriate) to investigate the interdependence between Agriculture and industry in their community. Teacher should assist learners with leading questions to help them establish the interdependency between Agriculture and industry in their community. Teacher should challenge learners with the ability to give further examples of the interdependency between Agriculture and industry.
* Experiential learning: In mixed-ability/mixed-gender groups (where applicable), learners watch a video, pictures or embark on a field trip to a farm and an agro-based industry such as corn mill. Learners identify how the farm and the agro-based industry depend on each other and build a portfolio. All learners should be involved in the portfolio building. Talented learners should be encouraged to assist those with difficulties.

iii. Key Assessments * Assessment Level 1: Identify the raw materials used for producing tomatoes paste, vegetable oil milk and canned beef.
* Assessment Level 2: Discuss the interdependency between Agriculture and the chemical industry
* Assessment Level 3: Research on the impact of financial institutions on the development of Agriculture.
* Assessment Level 4: How have the research institutions influenced the growth of Agriculture in Ghana?

Theme/Focal Area 3i. Learning Tasks* List the challenges facing Agriculture in an Industrialising Society.
* Suggest solutions to the challenges facing Agriculture in an industrialising society
* Write an essay on the economic challenges facing Agriculture in an industrialising society and suggest solutions.

ii. Pedagogical Exemplars * Initiating talk for learning: Teacher puts learners in mixed-gender/ability groups (where applicable) to discuss the various challenges facing Agriculture in an industrialising society. Teacher should assist learners with difficulty in identifying the challenges facing Agriculture in an industrialising society. Talented learners should be challenged to explain further the challenges facing Agriculture in an industrialising society.
* Collaborative learning: Learners in mixed ability groups write an essay on the challenges of Agriculture in an industrialising society, suggesting possible solutions. Teacher should ensure that all learners participate in the activity. Teacher should encourage talented learners to assist group members with difficulty in information gathering and writing of the essay.

iii. Key Assessments * Assessment Level 1: State at least two (2) challenges facing Agriculture in an industrialising society.
* Assessment Level 2: Provide solutions to the following challenges facing Agriculture in an industrialising society: i) Declining workforce: and ii) Technological advancement
* Assessment Level 3: How will you deal with an identified challenge in Agriculture in your community.
* Assessment Level 4: What advice would you give to an investor who wants to venture into farming to overcome anticipated challenges.
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| **Keywords/phrases** | Agriculture, Industrialising Society, interdependencies between Agriculture and industry, Agro-based industries, etc. |

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| **Lesson 1** |
| **Main Lesson drawing on Concepts, Skills and Competencies to reinforce as in the Subject Teacher Manual** |
| **Teacher Activity**  | **Learner Activity** |
| **Starter Activity (e.g., 10 minutes)**Using Talk for learning, let learners explain the meaning, types and importance of Agricultural Education.Ask learners to present their findings to the whole class. |
| **Introductory Activity (e.g., 20 minutes)**Ask learners to think about the meaning of industry in Agriculture and share their thoughts in pairs. By using the computer and the internet, let learners surf the internet to guide them to define the meaning of industry in Agriculture.Hint:Encourage learners to show respect and tolerance for individual diverse views as they think pair and share.**Activity 1 (e.g., 40 minutes)*** Put learners in mixed-ability/gender-based groups for learners to surf the internet to come up with the types of industries in Agriculture and their importance in promoting growth and development.
* Assist learners with website links to where they can access information on the types of industries in Agriculture and their importance in promoting growth and development.
* Monitor learners not to veer into unapproved sites. Teacher should ensure that all learners fully participate in the activity to prevent a few learners from hijacking the activity. Learners who know how to surf the internet should be encouraged to assist those with difficulties.

**Hint:**Set ground rules to discourage teasing of learners with speech problems and those who might give wrong answers. **Activity 2 (e.g., 40 minutes)*** In their mixed ability groups, let learners investigate the interdependence between Agriculture and industry in their community.
* Assist learners with leading questions to help them establish the interdependency between Agriculture and industry in their community.
* Challenge learners with the ability to give further examples of the interdependency between Agriculture and industry.
 | **Introductory Activity** I. Explain the meaning of industry in Agriculture using the computer and the internet.**Activity 1** * Discuss the types of industries in Agriculture and their importance in promoting growth and development
* Access information on the types of industries in Agriculture and their importance in promoting growth and development using website.

**Activity 2** * Investigate and discuss the interdependence between Agriculture and industry in the community.
* Establish the interdependency between Agriculture and industry in their community.
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| **Assessment DoK aligned to the Curriculum and Subject Teacher Manual** |
| **Level 1:** Define industry in Agriculture?  **Level 2:** Discuss at least two (2) importance of industries in Agricultural production.  **Level 3:** Research on the agro-based Industries in your community and what they produce. **Level 4:** What agro-based industry can be established in your community and why? |
| **Lesson Closure** **10 minutes** **In completing this part, refer to the Essential Questions to check that learning has taken place.** |
| a) Debrief by asking learners questions on what they have learnt and whether it has some links with the essential questions.b) Summarize key points and fill in gabs left by learners.c) Ask learners to read on Modern Technical and Mechanized Agriculture |
| **Reflection & Remarks** |
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| **Lesson 2** |
| **Main Lesson drawing on Concepts, Skills and Competencies to reinforce as in the Subject Teacher Manual** |
| **Teacher Activity**  | **Learner Activity** |
| **Starter Activity (e.g., 10 minutes)**Review learners’ previous knowledge using video on agricultural and industry by asking them to give the meaning of “industry in agriculture” in mixed-ability groups and present their findings.  |
| **Introductory activity (e.g., 15 minutes)**In mixed ability group, let learners brainstorm to come up with the relation between cocoa farmers and milo producing the industry in Ghana. **Activity 1 (e.g., 45 minutes)**Put learners in mixed-gender/mixed-ability groups to investigate the interdependence between Agriculture and industry in their community surfing the internet. Hints: i. Teacher should assist learners with leading questions to help them establish the interdependency between Agriculture and industry in their community. ii. Teacher should challenge learners with the ability to give further examples of the interdependency between Agriculture and industry. **Activity 2 (e.g., 40 minutes)** i. In mixed-ability/mixed-gender groups, learners watch a video, pictures or embark on a field trip to a farm and an agro-based industry such as corn mill. ii. Learners identify how the farm and the agro-based industry depend on each other and build a portfolio. **Hints**: i. All learners should be involved in the portfolio building. ii. Talented learners should be encouraged to assist those with difficulties.  | **Introductory activity**  In mixed ability group brainstorm to come up with the relation between cocoa farmers and milo producing the industry in Ghana.  **Activity 1**In mixed-gender/mixed-ability groups, investigate the interdependence between Agriculture and industry in their community surfing the internet.**Activity 2** i. In mixed-ability/mixed-gender groups, watch a video, pictures or embark on a field trip to a farm and an agro-based industry such as corn mill. ii. Identify how the farm and the agro-based industry depend on each other and build a portfolio.  |
| **Assessment DoK aligned to the Curriculum and Subject Teacher Manual** |
| Level 1: State at least two (2) challenges facing Agriculture in an industrialising society.Level 2: Provide solutions to the following challenges facing Agriculture in an industrialising society: i) Declining workforce: and ii) Technological advancementLevel 3: How will you deal with an identified challenge in Agriculture in your community.Level 4: What advice would you give to an investor who wants to venture into farming to overcome anticipated challenges. |
| **Lesson Closure** **10 minutes****In completing this part, refer to the Essential Questions to check that learning has taken place.**  |
| a) Debrief by asking learners questions on what they have learnt and whether it has some links with the essential questions.b) Summarize key points and fill in gabs left by learners.c) Ask learners to read on Agriculture and Industry.  |
| **Reflection & Remarks** |
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