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| **Learning Planner** | | | | | | | | |
| **Subject** | *General science* | **Week** | | *23* | **Duration** | *180 min* | **Form** | *SHS 1* |
| **Strand** | **RELATIONSHIPS WITH THE ENVIRONMENT** | **Sub-Strand** | | Technology in our Local Industries | | | | |
| **Content Standard** | Explore the production of an indigenous food (gari, akyeke, yakeyake. kenkey [Ga or Fante], aboloo, tubaani, dawadawa, etc). | | | | | | | |
| **Learning Outcome(s)** | Conduct a project on the production of an indigenous food and produce a report | | | | | | | |
| **Learning**  **Indicator(s)** | Investigate the production of an indigenous food to identify the science underlying the stages of production. | | | | | | | |
| **Essential Question(s)** | What process is involve in making tubani?  What Science underline fermentation in food production?  What materials will be needed to demonstrate to learners Technology in our Local Industries. | | | | | | | |
| **Pedagogical Strategies** | * Collaborative learning * Activity-based learning * Demonstration * Field trip | | | | | | | |
| **Teaching & Learning Resources** | * Internet sources (https://www.youtube.com/watch?v=1MtzyxQiqKo, https://www.youtube.com/watch?v=Kc7duzDEa6Y) * Camera and voice recording device. * Journal. * Local food materials/ingredients * Checklist of science processes involved in processing local food. * Writing materials | | | | | | | |
| **Key Notes on Differentiation** | | | | | | | | |
| 1. Content  * Identify indigenous food in your community and its ingredients. * explanation of processes involved in gari production * Application of scientific processes involved in gari production, etc.  1. Pedagogical Exemplars  * Place learners into mixed-ability and mixed-sex groups learning styles (where applicable.) Let the learners design an activity to prepare a named local food * Engage learners in groups to create more activities to prepare local food within their communities. * Encourage learners to do group or individual presentations about ideas generated*.* * Allow learners, working in convenient groups, to use the internet, books, and journals to brainstorm and write a report on the science underlying (fermentation, sun drying, etc.) the local food production stages., etc.  1. Key Assessment (DoK):  * Identify one indigenous food in your community and its ingredients * Write down the activities involved in preparing your named local food\ dish * What activities will you consider when preparing local food?, etc. | | | | | | | | |
| **Keywords** | Inhibits, microorganisms, digestibility, fermentation, etc | | | | | | | |
| **Lesson 1**  **Identify the Science Underlying the Stages of Production.** | | | | | | | | |
| **Main Lesson drawing on Concepts, Skills and Competencies to reinforce as in the Subject Teacher Manual** | | | | | | | | |
| ***Teacher Activity*** | | | ***Learner Activity*** | | | | | |
| **Starter *Activity (10 minutes)***  ***Ask learners to sing a patriotic song*** | | | | | | | | |
| ***Introductory Activity (15minutes)***   1. *Put learners into mixed-gender and mixed ability group.*     ***Activity 1 (40 minutes)***   1. *Ask learners to name some Ghanaian dishes in their mixed groups****.*** 2. *Show video of how Tubani is prepared to learners in their mixed groups.* 3. *Ask learners to note down the steps involve in the preparation of Tubani.*   ***Activity 2 (40 minutes)***   1. *Ask learners to discuss their observation of the process of preparing Tubani in their mixed groups.* 2. *Ask learners to present their observations and discussions to the class* | | | ***Introductory Activity***  *I seat in your mixed-gender and mixed ability groups*  ***Activity 1***   1. *Name some Ghanaian dishes* 2. *Watch video of how Tubani is prepared*   *III note down the steps involve in the preparation of tubani*  *Activity 2*   1. *Discuss yourr observation of the process of preparing Tubani* 2. Present your observation and discussion to the class | | | | | |
| **Assessment DoK aligned to the Curriculum and Subject Teacher Manual** | | | | | | | | |
| Level 4: What ingridients and process is involve in the preparation of Tubani? | | | | | | | | |
| **Lesson Closure**  ***In completing this part, refer to the Essential Questions to check that learning has taken place.*** | | | | | | | | |
| ***Activity (15 minutes)***  *Using Pass-that-question, ask learners to write any question on the lesson*  *Summarize the lesson highlighting the salient points.* | | | | | | | | |
| **Reflection & Remarks** | | | | | | | | |
| *Reflection*  *Remarks* | | | | | | | | |
| **Lesson 2**  **Identify the Science Underlying the Stages of Production.** | | | | | | | | |
| **Main Lesson drawing on Concepts, Skills and Competencies to reinforce as in the Subject Teacher Manual** | | | | | | | | |
| ***Teacher Activity*** | | | ***Learner Activity*** | | | | | |
| **Starter *Activity (10 minutes)***  *Ask learners to sing a patriotic song.*    ***Learners sing a patriotic song*** | | | | | | | | |
| ***Introductory activity (25 minutes)***   1. *Put learners into mixed-gender and mixed ability groups.* 2. *Review the process of preparing Tubani with the learners*     ***Activity 1 (125 minutes)***  *Ask each group to demonstrate the preparation of Tubbani in their mixed-gender and mixed ability group.* | | | ***Introductory activity***  *Seat in their mixed ability groups*   1. *Note down the process of preparing Tubani*     ***Activity 1(30 minutes)***  *Demonstrate the preparation of Tubbani* | | | | | |
| **Assessment DoK aligned to the Curriculum and Subject Teacher Manual** | | | | | | | | |
| Level 4: What activities will you consider when preparing Tubani?, | | | | | | | | |
| **Lesson Closure**  ***In completing this part, refer to the Essential Questions to check that learning has taken place.*** | | | | | | | | |
| ***Activity (15 minutes)***  *Access the food and award marks to each group* | | | | | | | | |
| **Reflection & Remarks** | | | | | | | | |
| *Reflection*  *Remarks* | | | | | | | | |