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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
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| **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
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| **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.
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| **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
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| **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* |