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| **Learning Planner** |
| **Subject** | *General science* | **Week** | *21* | **Duration** | *180 min* | **Form** |  *SHS 1* |
| **Strand** | **RELATIONSHIPS WITH THE ENVIRONMENT** | **Sub-Strand** | Technology in our Local Industries |
| **Content Standard** | Demonstrate understanding of the process of local soap making and design methods of producing soaps for different purposes for income generation. |
| **Learning Outcome(s)** | Produce local soap in the community. |
| **Learning****Indicator(s)** | Describe the process of local soap production using technology devices. |
| **Essential Question(s)**  | How does technology help in the production of soap?What peocesses are involve in making local soap?What materials are needed to demonstrate to learners how to make soap. |
| **Pedagogical Strategies** | * Collaborative learning
* Talk-for-learning/ brainstorm
* Demonstration
* Field trip
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| **Teaching & Learning Resources** | * Writing materials
* Camera.
* Voice recording device
* Journal from field trip
* Internet sources (https://www.youtube.com/watch?v=1MtzyxQiqKo, https://www.youtube.com/watch?v=Kc7duzDEa6Y)
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| **Key Notes on Differentiation** |
| 1. Learning task
* Explain term saponification.
* Explain how technology can help in the production of local soap
* Describe the process of making local soap, etc.
1. Pedagogical Exemplars
* Organise a visit or field trips to local soap making facilities where learners can observe the production process firsthand
* Putting learners in mixed ability groups, let them search the internet, brainstorm/think-pair-share on the science in the process (Saponification) of local soap making
* Showcase real-life examples of local soap producers who have successfully established their businesses
* Research the different approaches to making soap in Ghana and other places, etc.
1. Key Assessment
* Explain any 3 processes in the production of local soap
* Explain saponification in your own words
* Write a report on the processes involved in soap making from your field trip, etc.
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| **Keywords** | *Saponification, production* |
| **Lesson 1****Production of Local Soap** |
| **Main Lesson drawing on Concepts, Skills and Competencies to reinforce as in the Subject Teacher Manual** |
| ***Teacher Activity***  | ***Learner Activity*** |
| **Starter *Activity (10 minutes)*** ***Organize learners for the field trip*** |
| ***Introductory Activity (5minutes)****Discuss with learners their purpose of the filed trip and the expectations.* ***Activity 1 (120 minutes)****Organise ar field trip to local soap-making facilities for learners to observe the production process of soap firsthand.****Note: take notes/photos from the field trip*** | ***Introductory*** *Note down the purpose and expectations of the field trip.* ***Activity 1 (40 minutes)****A field trip to a local soap making facility* |
| **Assessment DoK aligned to the Curriculum and Subject Teacher Manual** |
| * Level 2: Cross-share and reflect on the notes the you wrote during the field trip for peer review and presentations
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| **Lesson Closure** ***In completing this part, refer to the Essential Questions to check that learning has taken place.*** |
| ***Activity (15 minutes)*** *Encourage learner to ask questions base on their observations.**Ask a learner to give a vote of thanks* |
| **Reflection & Remarks** |
| *Reflection**remarks* |
| **Lesson 2****Production of Local Soap** |
| **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 patrotic song*** |
| ***Introductory activity (5 minutes)****Put learners in their mixed ability groups****Activity 1 (25 minutes)****Ask learners to search the Internet, and think-pair-share on the science in the process (Saponification) of local soap making in their mixed groups* ***Activity 2 (45 minutes)****Ask learners to present their observation from the field trip and the findings on the internet on soap making in their mixed ability groups*  | ***Introductory activity*** *Seat in your mixed ability groups****Activity 1*** *Search the Internet, and think-pair-share on the science in the process of Saponification (soap making.****Activity 2*** *present their observation from the field trip and the findings on the internet on soap making in their mixed ability groups* |
| **Assessment DoK aligned to the Curriculum and Subject Teacher Manual** |
| * Write a report on the processes involved in soap making from your field trip.
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| **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* |