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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 | | | | | | | |
| **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) | | | | | | | |
| **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. | | | | | | | | |
| **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 | | | | | | | | |
| **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. | | | | | | | | |
| **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* | | | | | | | | |