WEEK 5

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| **Week Ending:** | | **DAY:** | | | **Subject:** Science | | |
| **Duration: 100mins** | | | | | **Strand:** Humans & the Environment | | |
| **Class:** B9 | | **Class Size:** | | | **Sub Strand:** Understanding the Environment | | |
| **Content Standard:**  B9.5.5.1 Demonstrate knowledge and skills in the use of plant roots, stems, leaves, flowers, and fruits for agricultural and non-agricultural purposes | | | **Indicator:**  B9.5.5.1.1 Show and list the uses of different plant parts for agricultural and non-agricultural purposes. | | | | **Lesson:**  1 of 2 |
| **Performance Indicator:**  Learners can identify plant parts that are used for agricultural and non-agricultural purposes | | | | **Core Competencies:**  Critical Thinking and Problem Solving (CP), Communication and Collaboration (CC) Digital Literacy (DL), Creativity and Innovation | | | |
| **References:** Science Curriculum Pg. 122 | | | | | | | |
| **Key words: Agriculture, Non- Agriculture, plants, product** | | | | | | | |
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| Phase/Duration | Learners Activities | | | | | Resources | |
| PHASE 1: **STARTER** | Write "plants" on the board and ask learners to brainstorm a list of products we get from plants (e.g., food, clothes, medicine).  Discuss the different ways plants are used in our daily lives.  Show pictures or diagrams of different plant parts (root, stem, leaf, flower, fruit, seed).  Briefly explain the function of each part in the plant's life cycle. | | | | |  | |
| PHASE 2: **NEW LEARNING** | Divide learners into groups of 3-4. Distribute pictures of various plant-based products (e.g., bread, cotton t-shirt, wooden furniture, medicine bottle).  Ask each group to sort the pictures based on the plant part used to make the product. Encourage discussion and justification for their choices.  As a class, create a large chart on the board with two sections: "Plant Part" and "Agricultural/Non-agricultural Products."  Learners take turns placing pictures in the appropriate sections and explaining the connection between the plant part and the product.  Discuss specific examples of how each plant part is used for agricultural and non-agricultural purposes:   * **Roots:** Food storage (e.g., carrots, potatoes), medicine (e.g., ginger) * **Stems:** Food (e.g., sugarcane), construction (e.g., lumber) * **Leaves:** Food (e.g., lettuce, spinach), medicine (e.g., tea leaves) * **Flowers:** Decoration, medicine (e.g., chamomile) * **Fruits:** Food, beverages (e.g., juice) * **Seeds:** Food (e.g., grains), planting for new plants   Assessment  Match the following plant parts to their uses (agricultural or non-agricultural):   * Root - Making furniture * Stem - Storing food for winter * Leaf - Producing medicine * Flower - Growing new plants * Fruit - Making clothes   Give two examples of plant-based products (one agricultural, one non-agricultural) and the plant part used for each. | | | | | Pictures/Diagrams of different plant parts | |
| PHASE 3: **REFLECTION** | Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.  Take feedback from learners and summarize the lesson. | | | | |  | |

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| **Class:** B9 | | **Class Size:** | | | **Sub Strand:** Understanding the Environment | | |
| **Content Standard:**  B9.5.5.1 Demonstrate knowledge and skills in the use of plant roots, stems, leaves, flowers, and fruits for agricultural and non-agricultural purposes | | | **Indicator:**  B9.5.5.1.1 Show and list the uses of different plant parts for agricultural and non-agricultural purposes. | | | | **Lesson:**  1 of 2 |
| **Performance Indicator:**  Learners can list the uses of plant parts for agricultural and non-agricultural purposes | | | | **Core Competencies:**  Critical Thinking and Problem Solving (CP), Communication and Collaboration (CC) Digital Literacy (DL), Creativity and Innovation | | | |
| **References:** Science Curriculum Pg. 122 | | | | | | | |
| **Key words: Agriculture, Non- Agriculture, plants, product, Utilization** | | | | | | | |
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| Phase/Duration | Learners Activities | | | | | Resources | |
| PHASE 1: **STARTER** | Briefly review the different plant parts and their basic functions from the previous lesson.  Ask learners: Imagine a simple food item like bread. Can you think of the different plant parts involved in making bread? (e.g., wheat grains for flour - seeds, straw for tools - stems)  Discuss the concept of using various plant parts throughout the agricultural process. | | | | |  | |
| PHASE 2: **NEW LEARNING** | Divide learners into pairs or small groups. Distribute pictures/diagrams of different plant parts.  Ask each group to brainstorm a list of uses for their assigned plant part (agricultural and non-agricultural). Encourage them to be creative and think beyond the obvious.  As a class, create a large chart on the board with two sections: "Plant Part" and separate columns for "Agricultural Uses" and "Non-agricultural Uses."  Sharing and Discussion: Each group takes turns sharing their brainstormed uses, placing them in the appropriate category on the chart.  Facilitate discussion about the connections between plant parts and their diverse applications.  Provide specific examples to illustrate the various uses listed on the chart. You can use the following categories as a guide:  **Agricultural Uses:**   * Planting (seeds) * Tools (stems) * Animal housing (straw from stems) * Animal feed (leaves, fruits, seeds) * Soil improvement (leaves, stems for compost) * Pest and disease control (insecticidal leaves, fungicidal extracts)   **Non-agricultural Uses:**   * Herbal medicine (leaves, roots, flowers) * Construction (lumber from stems, bamboo for structures) * Furniture (wood from stems) * Artefacts (wicker baskets from stems, dyes from leaves) * Ceremonies/rituals (flowers, leaves for offerings) * Education (plant specimens for study)   Assessment  Match the following plant parts to their uses (agricultural or non-agricultural):   * Root - Making tea * Stem - Planting new trees * Leaf - Building a fence * Flower - Animal bedding * Fruit - Natural dye   List one example each of an agricultural and a non-agricultural use for a plant part of your choice. | | | | | Pictures/Diagrams of different plant parts | |
| PHASE 3: **REFLECTION** | Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.  Take feedback from learners and summarize the lesson. | | | | |  | |