**Learning Unit**

**The Department of Science Level of Students: M. 1**

**Subject Code: SC20201 Subject: Universal Science 1**

**Number of Credit: 1.0 Time: 40 Periods**

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| --- | --- | --- | --- | --- |
| **Learning Unit** | **Time/ hours** | **Learners’ Key Competencies - Activities** | **Teaching Materials** | **Evaluation Tools** |
| **1. Introduction to the Scientific Method**1.1Science and Technology1.2 The Major Elements of Science1.3 The Scientific Method1.4 The branches of Science 1.5 Safety Rules in the Laboratory1.6 Laboratory Apparatus1.7 Handling hazardous substances  | **7**1111111 | **Learners’ Key Competencies** Science Knowledge, scientific process, and scientific skills* Experiment
* Explanation
* Classification
* Organizing Data and Communication
* Interpreting Data and Conclusion
* Questioning/ Problem Determination
* Hypothesis
* Data Collection
* Analyzing Data
* Conclusion and Communication

 **Activities**5E Model  | 1. Textbook
2. Supplementary Sheets
3. Work sheets
4. PowerPoint Presentation
5. Websites
6. Learning Resources Centre
7. Laboratory Apparatus
 | 1. Quizzes
2. Tests
3. Exercises
4. Concept Mapping
5. Observation form
6. Behavior

Observation  |
| **2. The Cell- The unit of Life**2.1 Microscope2.2 What is a cell?2.3 Unicellular and Multicellular Organisms2.4 Animal Cells2.5 Plant cells2.6 Prokaryotes and Eukaryotes | **13**221332 |

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| **3. Botany**3.1 The importance of Plants3.2 Photosynthesis3.3 Respiration3.4 Nutrients Needed for Healthy Growth of Plants3.5 Transport in Plants- diffusion and osmosis in plants- transport of water, mineral and food in plants3.6 Reproduction in Plants- reproductive parts of plant- pollination- fertilisation- parts of seed- asexual reproduction in flowering plants | **20**133166 | **Learners’ Key Competencies** Science Knowledge, scientific process, and scientific skills* Experiment
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* Classification
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* Interpreting Data and Conclusion
* Questioning/ Problem Determination
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 **Activities**5E Model  | 1. Textbook2. Supplementary Sheets3. Work sheets4. PowerPoint Presentation5. Websites6. Learning Resources Centre7. Laboratory Apparatus | 1. Quizzes2. Tests3. Exercises4. Concept Mapping5. Observation form6. Behavior  Observation |