***SCHEME OF WORK***

***NAME OF SCHOOL: NEW HOPE ACADEMY***

***NAME OF SUBJECT: BIOLOGY***

***NAME OF FACILITATOR: MUWANGUZI MICHEAL***

***NUMBER OF STUDENTS: 49***

***CLASS: S.2***

***TERM: 1***

***YEAR: 2024***

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| ***WEEK*** | ***PEROIDS*** | ***THEME/TOPIC*** | ***SUB-TOPIC & CONTENT*** | ***COMPETENCY*** | ***LEARNING ACTIVITY*** | ***BIBLICAL CONCEPT*** | ***METHODOLOGY*** | ***LEARNING AIDS*** | ***SKILLS*** | ***LEARNING OUTCOME*** | ***REFERENCE*** | ***REMARKS*** |
| 1 | 4hrs | ***SOIL/PHYSICAL AND CHEMICAL PROPERTIES OF SOIL*** | ***Types of soil***  ***Soil layers***  ***Characteristics of each layer*** | The learner should know that different soil types are made of different components and the balance of these component determines the properties of the soil | In groups, learners observe three different soil types | Gen:1:10 | Discussion method  Guided discovery method | Soil samples like clay, sand and loam soil | Critical-thinking and Analytical skills | The learner should be able to identify various soil types | Baroque Teachers guide book one  Internet  LSC syllabus |  |
| 2 | 4hrs | DO | ***Constituents of soil***  ***Properties of soil*** | DO | In groups, learners perform various experiments on soil composition | DO | Experimentation method | Loam soil,beaker,water,lime water | Analytical skills | Learner should be able to;  Identify different constituents of soil |  |  |
| 3 | 4hrs | ***DO*** | ***Water retention and drainage*** | DO | In groups,learners perform experiments on water holding capacity of clay,loam and sand soil | DO | Experimentation method  Discussion | Beakers,test tube, soil samples from each type. | Co-operation skills | The learner should be able to;  Appreciate that different soil types have different water holding capacities | Text book  Internet |  |
| 4 | 4hrs | DO | **Capillarity of soil**  **Soil PH** | DO | In groups, learners perform experiments on capillarity of different soils,Also learners test for pH of different soil collected from different sites. | DO | Experimentation  Discussion | DO | Analytical skills | Learners should;  Be able to determine soil pH  Be able to understand that different soils have different Ph due to different locations | Textbook  internet |  |
| 5 | 4hrs | DO | **Soil air,water and humus**  **Activity of integration** | DO | Learners in groups perform experiments to determine soil water,humus and air | DO | Experimentation method | Heat source, beaker, test tubes | Cooperativeness  Analytical | In groups learners perform experiments to investigate presence of humu,air and water | Text book  Internet |  |
| 6 | 4hrs | SOIL/SOIL EROSION ND CONSERVATION:CAUSES, EFFECTS AND PREVENTION | **Features of fertile soil**  **Soil erosion**  **Factors leading to soil erosion** | The Learners know how and why soil fertility should be maintained for the soil to continue to be useful to living organisms | Learners in groups discuss features of fertile soil, factors leading to soul erosion | Num:13:20  2Chro.26:10  Matt.13:23 | Brainstorming  Discussion | Charts | Cooperativeness | Learners should be able to;  Identify features of fertile soil | DO |  |
| 7 | 4hrs | DO | **Types of erosion**  **Causes of reduced soil fertility** | DO | *In groups learners discuss causes of reduced soil fertility and types of erosion*  *In groups learners move around school compound identifying types of erosion* | DO | Brain storming  Discussion | Charts | Cooperativeness |  | ***Internet*** |  |
| 8 | 4hrs | ***DO*** | ***Methods of soil conservation***  ***Soil Organisms that carry out decomposition*** | DO | Learners in groups discuss various methods of soil conservation,in groups learners discuss importance of soil decomposers | DO | Discussion | Charts | Collaboration skills | Learner should be able to;  Appreciate role of soil decomposers | Text book  Internet |  |
| 9 | 4hrs | DO | **Nitrogen cycle**  **Micro-organisms in root noduled** | DO | Learners in groups role play the nitrogen cycle | DO | Role play method  Discussion | Charts,markers | Collaboration | Learners should be | Internet |  |
| 10 | 4hrs | DO | **Formation of compost in compost bin**  **Activity of Integration** | DO | Learners in groups discuss steps in formation of compost. | DO | Discussion | Plant remains, | Collaboration | Learners should be able to | LSC syllabus  Internet |  |