**REXCHRISTUS COLLEGE, KUBWA**

**LESSON PLAN FOR WEEK 1, LESSON II ENDING 13/09/2024**

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| **SUBJECT:** | **Biology** |  |
| **Theme**  **Date**  **Class**  **Time**  **Duration** | The Organism and its Environment  11/09/2024  SS1  8:40- 9:20 am  40 minutes |  |
| **Unit Topic**  **Lesson Topic** | Recognizing Living Things  Organisation of Life |  |
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| **Specific Objectives**    **Instructional Resources** | At the end of the lesson, learners should be able to classify:  At the end of the lesson, learners should be able to:   1. explain the organisation of life 2. describe the different levels of organisation of life 3. explain the complexity of organisation in higher organisms 4. make a comparison of the advantages and disadvantages of complex organisation   A chart showing different levels of organisation of life |  |
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| **STAGES/STEPS** | **TEACHER’S ACTIVITIES** | **STUDENTS ACTIVITIES** | **MODE** |
| **PRESENTATION** |  |  |  |
| **STEP 1 (PRESENTATION OF PRIOR IDEAS)** | The teacher reviews learners previous knowledge on “recognising living things" by asking learners to define living things and state characteristics of living things | Learners attempt the question | Individual |
| **STEP 2 (EXPLORATION)** | The teacher displays the charts showing the different organisation of life to learners | Learners observe and identify the different levels of organisation of life | Entire class |
| **STEP 3 (DISCUSSION)** | The teacher leads the discussion  **LEVELS OF ORGANIZATION OF LIFE**  Every living thing is made up of a cell or a number of cells. A single-celled organism is called unicellular while a many-celled organism is called multicellular. Organization of life is therefore the existence of life from a single-celled organism to a multicellular organism with complex forms that performs different functions. Four levels of organization of life exist, namely: cell, tissue, organ and system.   1. **Cell:** A cell is a functional and structural unit of protoplasm bounded by a membrane and containing nuclear and cytoplasmic materials. Some living things exist as cells which have cytoplasmic structures such as pseudopodia, cilia, flagella and vacuoles e.g. Amoeba, Chlamydomonas, Paramecium and Euglena. Common cells that perform distinct functions in plant and animals include sperm cells, nerve cells, bone cells, red blood cells, root hair cells etc. 2. **Tissues:** A tissue is a collection of cells which are similar in structure and functions. Hydra is an example of an animal that is made up of tissues only. Examples of tissues in animals and plants are epithelial tissue, blood, nerve tissue, muscle tissue, xylem and phloem tissues etc. 3. **Organ:** An organ is a collection of different tissues that perform a common function or functions e.g. Kidney, heart, brain, stem, roots etc. Example of organ in plant is onion bulb. 4. **System:**A system is a set of organs which co-operate to carry out one of the vital functions of life e. g. Digestive system, respiratory system, reproductive system, transport system etc     **Complexity of Organisation in Higher Organisms**  The organization of higher organisms is incredibly complex. Let's use the human body as an example. Humans have about 30 trillion cells, which are organized into more than 200 different types of tissue. The tissues are organized into more than 80 organs, which are organized into 11 organ systems. This complex organization is necessary for all the different functions of the human body, from breathing and digestion to movement and reproduction.  **A table comparing the advantages and disadvantages of complex organization:**   |  |  | | --- | --- | | **Advantage** | **Disadvantage** | | The complexity allows for incredible specialization | Vulnerability to system failure | | Increased efficiency | Increased risk of disease | | Greater variety of structures | More complex repair and regeneration | |  |  | | Learners pay attention to the teacher’s explanations | Entire class |
| **STEP 4 (APPLICATION)** | The teacher gives summary of the lesson   * Living things are organized in a hierarchical system Nucleus * The hierarchy of life goes from cells to tissues to organs to organ systems to organisms * The organization of higher organisms is incredibly complex * The advantages of this complex organization far outweigh the disadvantages | Learners understand the organisation of life | Entire class |
| **STEP 5 (EVALUATION)** | The teacher evaluates learners by asking the following questions   1. explain the organisation of life 2. describe the different levels of organisation of life 3. explain the complexity of organisation in higher organisms 4. make a comparison of the advantages and disadvantages of complex organisation | Learners attempt the questions | Individual |
| **ASSIGNMENT** | Construct a table that shows the different levels of organization  - Be sure to include at least five example of a plant or animal for each level of organization. |  |  |
| **REFERENCE** | 1. Modern Biology for Senior Secondary Schools (Sarojini T.R.)  2. Essential Biology for Senior Secondary Schools (M.C. Michael )  3. Revealed Biology for Senior Secondary Schools and Colleges (C.J. Nmoye)  4. Excellence in Biology (F. Fakaye et al) |  |  |

**HOD’S COMMENT**:

**HOD'S NAME:** Mrs. Kelechi Michael

DATE: 09/09/2024

**Name of Teacher:** Mrs Esther Chidimma Egwuogu