**EMERALD ROYAL INTERNATIONAL SCHOOL MPAPE, ABUJA**

**LESSON PLAN AND NOTE FOR WEEK 5 ENDING FRIDAY 10thFEBRUARY 2023**

**TERM: SECOND TERM**

**WEEK:** **WEEK 5**

**DATE** :  **6TH - 10TH**   **FEBRUARY, 2023**

**SUBJECT: BIOLOGY**

**CLASS : SS 1**

**TOPIC: MAMMALIAN TEETH**

**SUB - TOPIC: 1**. **dentitio**n

1. **dental formula and adaptation.**
2. **enzyme.**

**PERIOD : 7th**

**TIME : 12: 30 - 1:00**

**DURATION : 40 minutes**

**AVERAGE AGE : 14 years**

**SEX: mixed**

**LEARNING OBJECTIVES:** by the end of the lesson,the students should be able to;

1. Define dentition and state the type of dentition.

2.state the dental formula and its adaptation.

1. Define and state the characteristics of enzyme.

**RATIONALE:** the students should understand dentition and enzyme..

**PREVIOUS KNOWLEDGE:** The students have been taught nutrition.

**INSTRUCTIONAL MATERIALS:** chart showing the dental formula.

**Reference Material:** Essential Biology foe Senior Secondary School by M.C. Michael.

**LESSON DEVELOPMENT**

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| **STAGES** | **TEACHER’S ACTIVITIES** | **STUDENTS’ ACTIVITIES** | **LEARNING POINT** |
| **INTRODUCTION** | The teacher introduces the lesson by reviewing the previous lesson. | The students pay attention. | To arouse the students interest. |
| **PRESENTATION**  **STEP 1** | The teacher defines dentition and states the types of dentition. | The students pay attention. | To keep them focus. |
| **STEP 2** | The teacher asks the students state the dental formula and their adaptation. | The students state the dental formula. | To encourage critical thinking |
| **STEP 3** | The teacher defines enzyme and state its characteristics. | The students pay attention. | To keep them focus. |
| **BOARD SUMMARY** | **MAMMALIAN TEETH (DENTITION) - Dentition**  refers to the number, arrangement and conformation of teeth in an organism.  **TYPES OF DENTITION**   1. **HOMODENT DENTITION -** This is when organism have the same type of teeth. All the teeth are of the same size, shape and functions example are found in fishes, amphibians and reptiles. 2. **HETERODENT DENTITION** - It is when organisms possess teeth of different shapes, sizes and functions. Examples are rabbits, man, dog, cattle etc.   Mammals has two sets of teeth ;   1. **Milk teeth** - This is type of teeth possess by children in human and is made up of the incisor, canine and premolar teeth without the the molar. It later fall off to be replaced by permanent teeth. 2. **Permanent teeth** - This is found in adult mammals and are of four types which are incisor, canine, premolar and molar teeth. They remains till old age and may be number up to 32 in man. 3. **Incisor** - These are located in the front of the jaw. They are flat, chisel- shaped with a sharp edge used for cutting and holding on to the prey so they do not escape. 4. **Canines** - They are found next to the incisors. They are sharp and pointed at the tips. Canines are used for tearing flesh and for catching the prey. 5. **Premolar** - they are located at the back of the jaw following canines. They have large, ridged flat surfaces used for grinding and chewing food. 6. **Molars** - they are located at the extreme back of the jaws. They are closely packed with ridged surfaces. They are used for chewing and grinding food.   **STRUCTURE OF THE TOOTH**  **picture of teeth**  A typical tooth such as the canine or incisor is made up of three regions which are ;   1. **The crown** - This is the part of the tooth that is above the the gum. 2. **The root** - this is embedded in the socket of the gum. 3. **The neck** - it is the narrow junction between the crown and the root.   **DENTAL FORMULA AND ADAPTATION**  The dental formula refers to the number and types of the teeth present in the mouth of an animal. The number and type of teeth present in the jaw of an animal is the reflection of special adaptation of mammalian teeth for feeding.   1. **Adaptation of mammalian teeth for feeding in an omnivorous example man.** 2. **The teeth of carnivorous example Dog.** 3. **Teeth of a herbivorous example Rabbit**   **ENZYME**  Enzyme is an organic catalyst proteinous in nature which promotes or speeds the chemical changes in living cells but are not themselves used up in the process.  Types of enzymes   1. Intracellular enzyme - They function inside the cells of living organisms. Examples are the enzyme that catalysed cell respiration inside the mitochondria. 2. Extracellular enzyme - they carry out their functions outside the cells. Examples are digestive enzyme.   Characteristics of enzymes   1. Enzymes are specific in action. 2. They remain chemically unchanged at the end of the reaction. 3. Their action is reversible. 4. They are required in small quantity. 5. They can function outside the body of the organism that produced them. 6. Enzyme act best over specific temperature range between 35 - 40 degree. 7. They act best at specific ph either acidic or alkalinity. 8. Enzymes are protein in nature. | The students ask questions for further clarification. | To create room for slow learners. |
| **Evaluation** | The teacher evaluates the students with the following questions;   1. Define dentition. 2. State and explain the types of dentition. 3. Explain the structure of the tooth. 4. State the formula adaptation of omnivorous, carnivorous and herbivorous. 5. Define enzyme and state at least 5 characteristics of enzyme. | The students attempt the questions. | To ascertain their level of understanding. |
| **Conclusion** | The teacher concludes by coping the note on the board. She checks and marks the note. | The students copy the note on the board. | For future use. |
| **Assignment** | 1. Draw the structure of a tooth and label fully. | The students did and submit their assignment for marking and correction. | To encourage the students to study at home. |



14/3/2023

Principal Head Instructor