**EMERALD ROYAL INTERNATIONAL SCHOOL, MPAPE ABUJA**

**LESSON PLAN AND NOTE FOR WEEK 5 ENDING 2ND JUNE, 2023**

**TERM: THIRD**

**WEEK : 5**

**DATE: 29TH MAY - 2ND JUNE , 2023**

**SUBJECT : CHEMISTRY**

**TOPIC : CARBON AND ITS COMPOUNDS**

**SUB- TOPIC : 1. hydrogen trioxocarbonates(iv)**

1. **Preparation of hydrogen trioxocarbonates(iv)**
2. **Properties of hydrogen trioxocarbonates(iv)**

**PERIOD: 1ST**

**TIME : 8: 10 - 8 :50**

**DURATION:**  **40 minutes**

**CLASS: SS1**

**NUMBER IN CLASS: 7**

**AVERAGE AGE: 14 years**

**SEX: mixed**

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

1. Explain hydrogen trioxocarbonates(iv).
2. Explain the preparation of hydrogen trioxocarbonates (iv).
3. State the properties of hydrogen trioxocarbonates(iv).

**RATIONALE:** The students should understand the preparation and properties of hydrogen trioxocarbonates(iv).

**PREVIOUS KNOWLEGDE:** The student have been taught trioxocarbonates(iv).

**INSTRUCTIONAL MATERIALS:** A chart showing the apparatus for preparation and properties of hydrogen trioxocarbonates(iv).

**REFERENCE MATERIALS:** New school Chemistry for Senior Secondary Schools by Osei Yaw Ababio .

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| **STEPS** | **TEACHER’S ACTIVITIES** | **STUDENTS’ ACTIVITIES** | **LEARNING POINTS** |
| **INTRODUCTION** | The teacher introduces the lesson by reviewing the previous lesson. | The students were active. | To arouse the students interest. |
| **PRESENTATION**  **STEP 1** | The teacher explains the preparation of hydrogen trioxocarbonates(iv). | The students pay attention. | To keep them focus for better understanding. |
| **STEP 2** | The teacher asks the students to state the apparatus for the preparation of hydrogen trioxocarbonates(iv). | The students state the apparatus for the preparation of hydrogen trioxocarbonates(iv). | To encourage critical thinking. |
| **STEP 3** | The teacher explains the properties of hydrogen trioxocarbonates(iv). | The students pay attention. | To keep them focus for better understanding. |
| **BOARD SUMMARY** | **HYDROGEN TRIOXOCARBONATES(IV)**  Hydrogen trioxocarbonates(iv) are the acidic salt of trioxocarbonates(iv) acid. They are formed when a metal or ammonium radical replaces one of the two hydrogen atoms in the trioxocarbonates(iv) acid molecule. They are soluble in water. Only the hydrogen trioxocarbonates(iv) of ammonium , potassium and sodium can be isolated as acids, calcium hydrogen trioxocarbonates(iv) is responsible for hardness of water.  **PREPARATION OF HYDROGEN TRIOXOCARBONATES(IV)**  Hydrogen trioxocarbonates(iv) mat be prepared by passing carbon(iv) oxide through a cold solution of the corresponding hydroxide or trioxocarbonate(iv).  2OH = CO2 ------CO3 - H2O.  **PROPERTIES**   1. All hydrogen trioxocarbonates(iv) decomposes readily on heating or when their solutions are boiled to yield carbon(iv) oxide, water and the corresponding trioxocarbonates(iv).   2HCO3 ----------- CO3 +H2O + CO2.   1. Hydrogen trioxocarbonates(iv) reacts with acids to produce carbon (iv) oxide. This reaction is used to test for hydrogen trioxocarbonates(iv)   HCO3 + H ------- H20 + CO2. | The students ask question for clarification. | To create room for slow learners. |
| **EVALUATION** | The teacher evaluates the students with the following questions;   1. Explain hydrogen trioxocarbonates(iv). 2. Explain the preparation of hydrogen trioxocarbonates. 3. State 2 properties of hydrogen trioxocarbonates(iv). | The students attempt the questions. | To ascertain their level of understanding. |
| **CONCLUSION** | The teacher concludes by copying note on the board. She checks and marks the notes. | The students copy the note into their note books. | For future use. |
| **HOME WORK** | Explain the processes by which carbon(iv) oxide can be liberated or removed in the atmosphere | The students did your assignment and submit for marking and correction. | To encourage the students to study at home. |



22/5/2023

Principal Head Instuctor